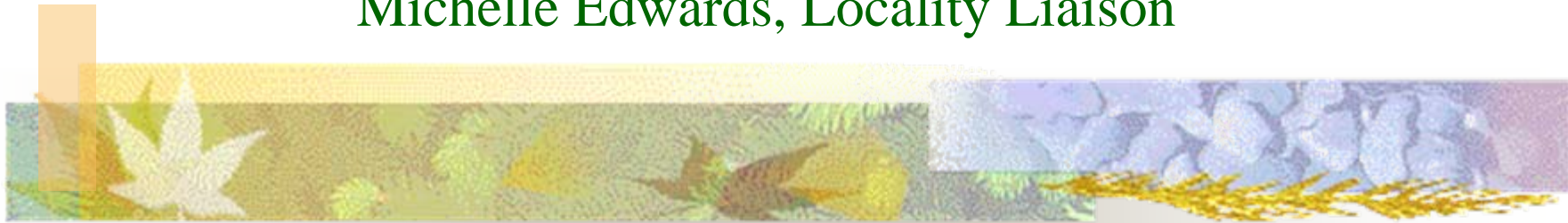


APPENDIX C

DCR- Natural Heritage Program

Michelle Edwards, Locality Liaison



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

Division of Natural Heritage

Conserving Virginia's biodiversity through inventory, protection and stewardship.



Virginia Coastal Zone
MANAGEMENT PROGRAM



Locality Assistance Program for Natural Heritage Conservation

■ Training and Support

- Training to provide explanations of NH conservation site data, rankings and terminology
- VA NH Data Explorer Training
- Continuous support from the DCR-NH Locality Liaison
- Follow-up meetings to discuss issues or concerns that may arise

■ Data Subscription

- Digital screening coverage CD
- VA NH Data Explorer subscription website
- A signed data license agreement is required
- No charge to local governments and non-profit organizations

■ Other Data Resources

- Virginia Conservation Lands Needs Assessment
- Conservation Lands Database
- Virginia Lands Conservation Data Explorer (includes both data sets listed above)



Locality Assistance Program for Natural Heritage Conservation

■ Project Review

- NH staff review of projects for NH resource occurrences and potential

■ Policy Guidance

- Recommended language for the comprehensive plan & other key planning documents: PDR/TDR Programs, overlay districts, etc.
- Guidance for establishment of local policies to incorporate NH resources into project review & approval

■ Biological Assessment

- Evaluation of current NH resource records for the locality
- Inventory work
- Recommendations for management / protection

DCR Mission

The Department of Conservation and Recreation

- Works with Virginians to conserve, protect, and enhance their lands and improve the quality of the Chesapeake Bay and our rivers and streams,
- Promotes the stewardship and enjoyment of natural, cultural and outdoor recreational resources, and
- Ensures the safety of Virginia's dams.



Fulfilling the mission....

DCR's Six Program Divisions

- Each Division offers program elements that when integrated create a comprehensive conservation and recreation agency.
 - Chesapeake Bay Local Assistance
 - Dam Safety
 - Natural Heritage
 - Planning & Recreational Resources
 - Soil and Water Conservation
 - State Parks



Virginia's Natural Heritage Program

- Mission: Identify, protect & conserve Virginia's biodiversity

- Focus on:

- Rare plants and animals
- Rare and exemplary natural communities
- Significant caves and karst features



The NatureServe Network

- DCR participates in an International Network of Natural Heritage Programs.
- The network helps Virginians make informed decisions, and helps carry our efforts and information to conservation decision-makers throughout the Western Hemisphere.
- The NatureServe Network is made up of:
 - 54 U.S. programs
 - 8 Canadian programs
 - 18 Latin American / Caribbean programs



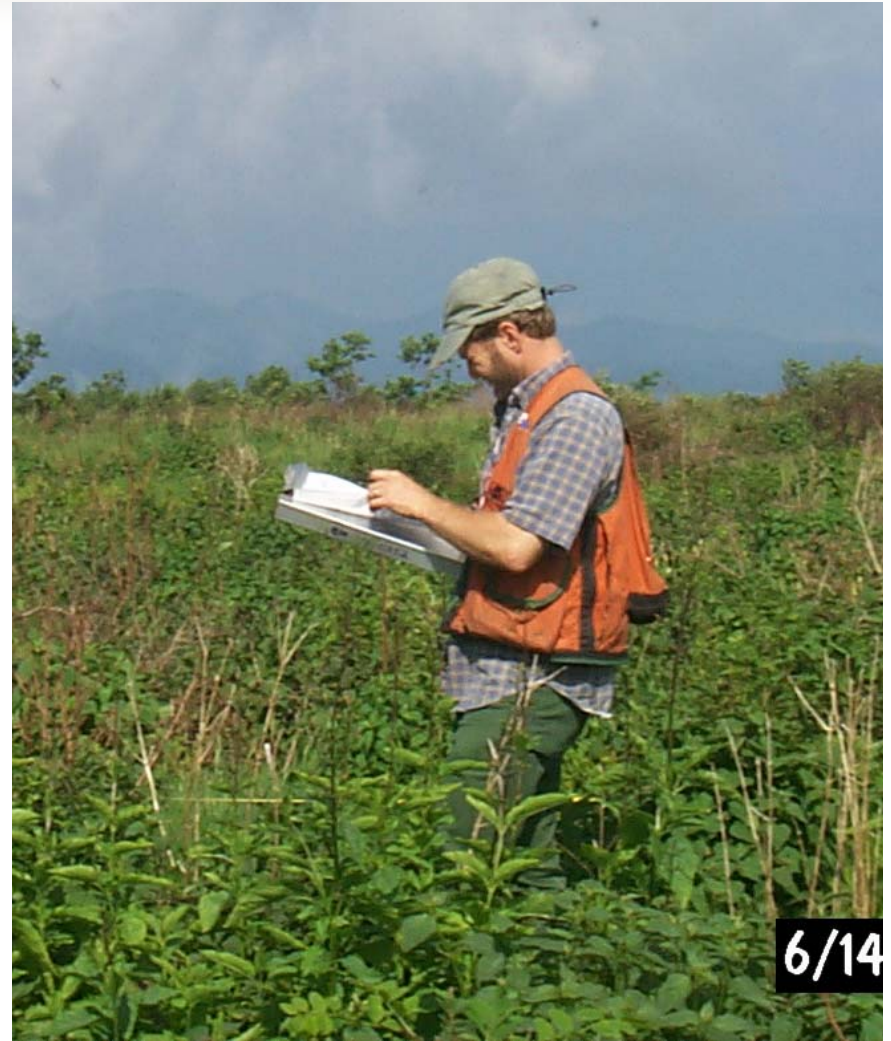


DCR - Division of Natural Heritage (DNH) Program Structure

- Inventory
- Natural Area Protection
- Natural Area Stewardship
- Information Management
- Environmental Review

Inventory

- Staff of botanists, zoologists and ecologists
- Find & document location and condition of natural heritage resources
- Work on public & private land
- Inventories done on a contract basis
 - Fee charged for this service



Natural Area Protection

Protect habitat through:

- Landowner education
- Resource management plans
- Virginia Registry of Natural Areas
- Conservation easements
- Acquisition of land through gift or purchase



Natural Area Stewardship

- Manage land to protect & enhance natural heritage resources
- Manage system of 49 preserves covering over 42,002 acres
- Provide expertise to federal, state & local agencies, & private landowners



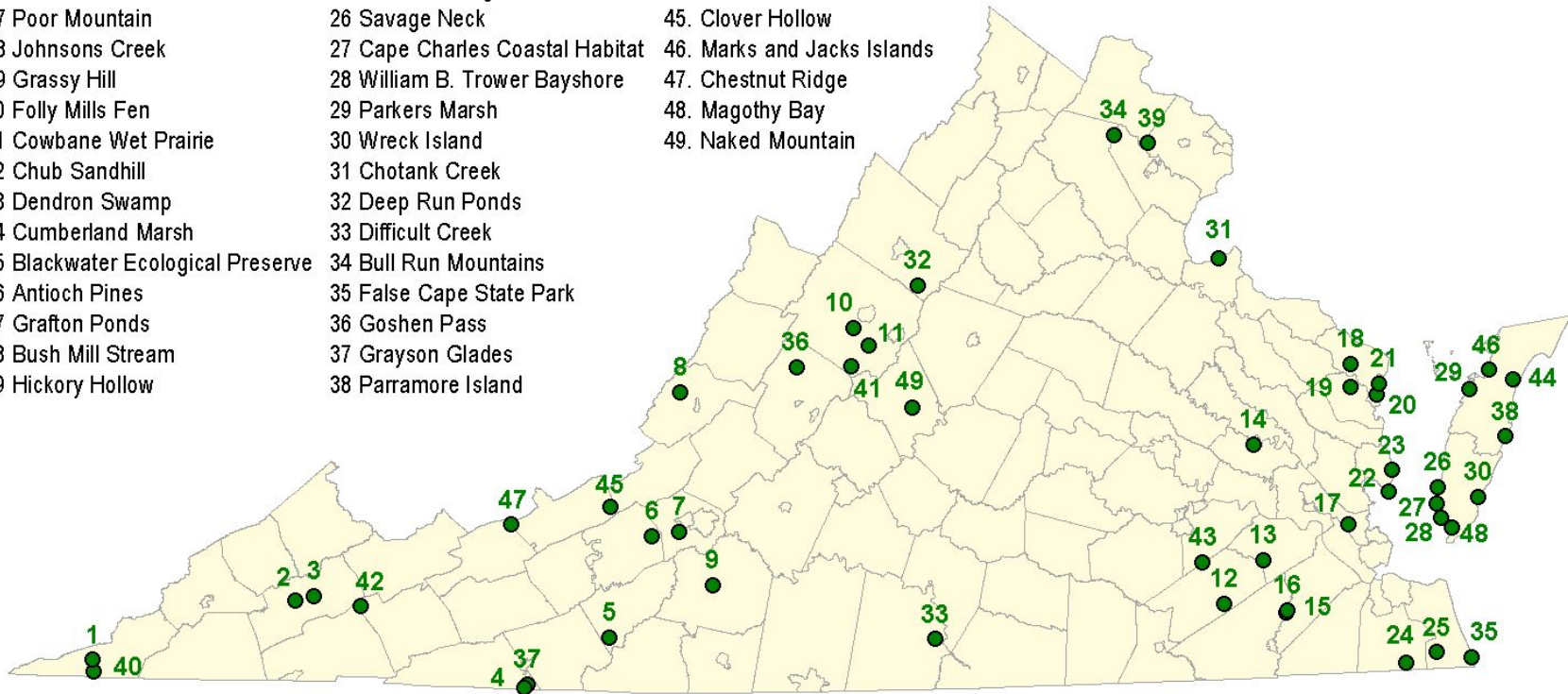
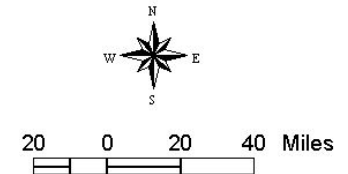
Virginia's Natural Area Preserve System

Virginia Department of Conservation and Recreation

49 State Natural Area Preserves - 42,002 Acres

● NATURAL AREA PRESERVES

- | | | |
|-----------------------------------|---------------------------------|-----------------------------|
| 1 The Cedars | 20 Hughlett Point | 39. Ellick Woodlands |
| 2 Cleveland Barrens | 21 Dameron Marsh | 40. Unthanks Cave |
| 3 Pinnacle | 22 New Point Comfort | 41. Mount Joy Pond |
| 4 Big Spring Bog | 23 Bethel Beach | 42. Red Rock Mountain |
| 5 Buffalo Mountain | 24 Northwest River | 43. Cherry Orchard Bog |
| 6 Pedlar Hills | 25 North Landing River | 44. Mutton Hunk Fen |
| 7 Poor Mountain | 26 Savage Neck | 45. Clover Hollow |
| 8 Johnsons Creek | 27 Cape Charles Coastal Habitat | 46. Marks and Jacks Islands |
| 9 Grassy Hill | 28 William B. Trower Bayshore | 47. Chestnut Ridge |
| 10 Folly Mills Fen | 29 Parkers Marsh | 48. Magothy Bay |
| 11 Cowbane Wet Prairie | 30 Wreck Island | 49. Naked Mountain |
| 12 Chub Sandhill | 31 Chotank Creek | |
| 13 Dendron Swamp | 32 Deep Run Ponds | |
| 14 Cumberland Marsh | 33 Difficult Creek | |
| 15 Blackwater Ecological Preserve | 34 Bull Run Mountains | |
| 16 Antioch Pines | 35 False Cape State Park | |
| 17 Grafton Ponds | 36 Goshen Pass | |
| 18 Bush Mill Stream | 37 Grayson Glades | |
| 19 Hickory Hollow | 38 Parramore Island | |



Information Management

- Manages natural heritage resource data
 - Integrated system
 - Oracle Database
 - Comprehensive GIS mapping system
- Develops products for federal, state & local governments, and citizens that present the data in a user-friendly format
 - Digital Data
 - NH Data Explorer
 - VCLNA
 - Maps





Environmental Review

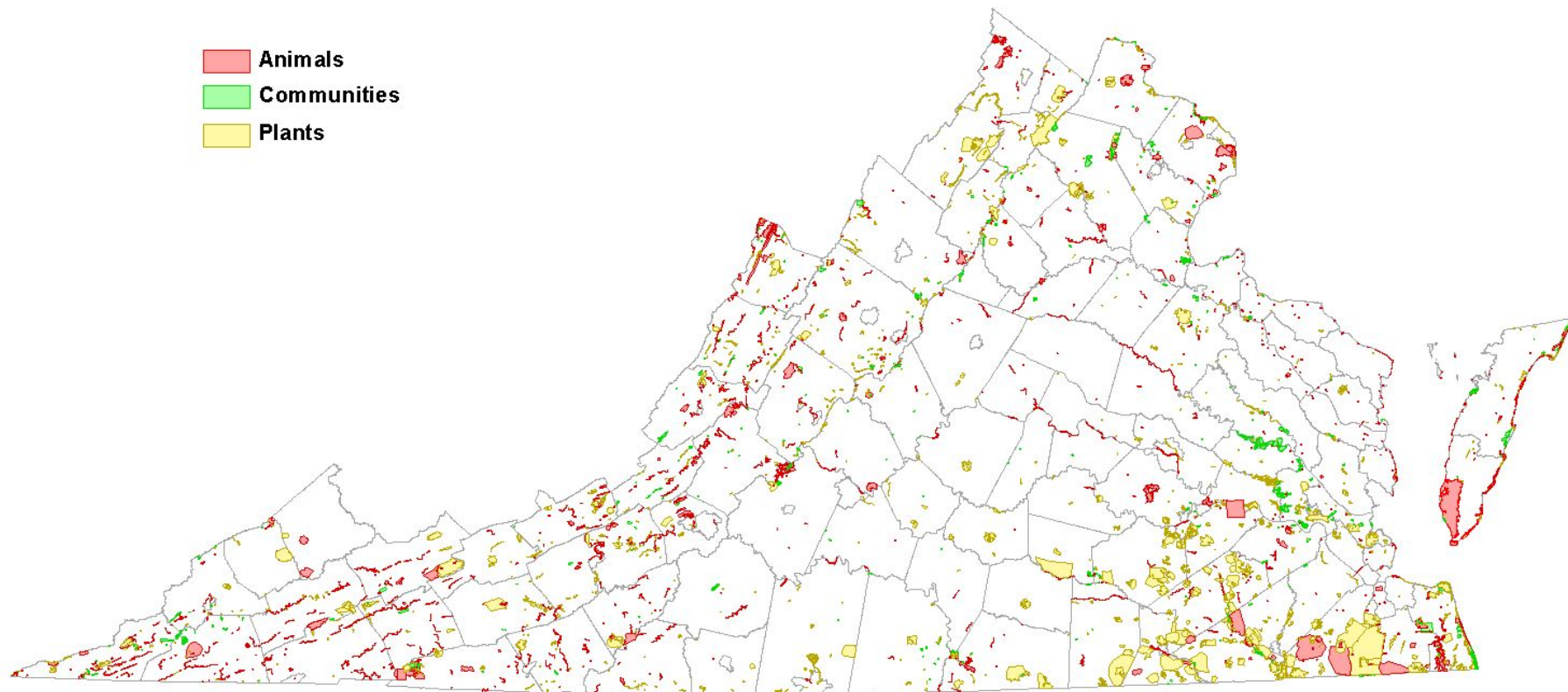
■ Project Review

- Assesses the potential for proposed projects to impact natural heritage resources and recommends ways to avoid or minimize these impacts.

■ Locality Liaison

- Works with local governments and other conservation partners to encourage comprehensive use of natural heritage data and services for conservation planning and decision making.

Natural Heritage Resources in Virginia





Why not just listed species?

- DNH tracks information on 258 G1 and G2 species and communities (the rarest of the rare globally).
- 6 of the 258 are communities, which are not listed
- 42 of the 258 are federally listed
- 23 of the 258 are not federally listed but are state listed
- This leaves 193 G1 - G2 NH resources unlisted
- 38 of the non-listed G1 - G2 species and communities are known from 2 or 3 locations
- 91 of the non-listed G1 - G2 species and communities are known from one location
- Conclusion: protecting only listed species could cause a species' extinction with just one

Wind-tidal Oligohaline Marsh (G1/S1)



(Taken at North Landing River Natural Area Preserve)

Peatland Atlantic White Cedar Forests (G2/S1)



*(Taken along the east side of the North Landing River
near Creeds, City of Virginia Beach)*

Bay-gall Holly (G5/S2/NL/NL)



UGA1120533

VA Least Trillium (G3T2/S2/SOC/NL)





by Shirley Denton



Elliot's Aster
(G4/S1/NL/NL)

King's Hairstreak (G3G4/S2S3/NL/NL)



©2007 Jeffrey Pippen



Barking Tree Frog
(G5/S1/NL/LT)



Canebrake Rattlesnake (G4TUQ/S1/NL/LE)



Loggerhead Turtle (G3/S1B,S1N/LT/LT)



Bald Eagle
(G4/S2S3B,S3N/NL/LT)



Great Egret

(G5/S2B,S3N/NL/SC)



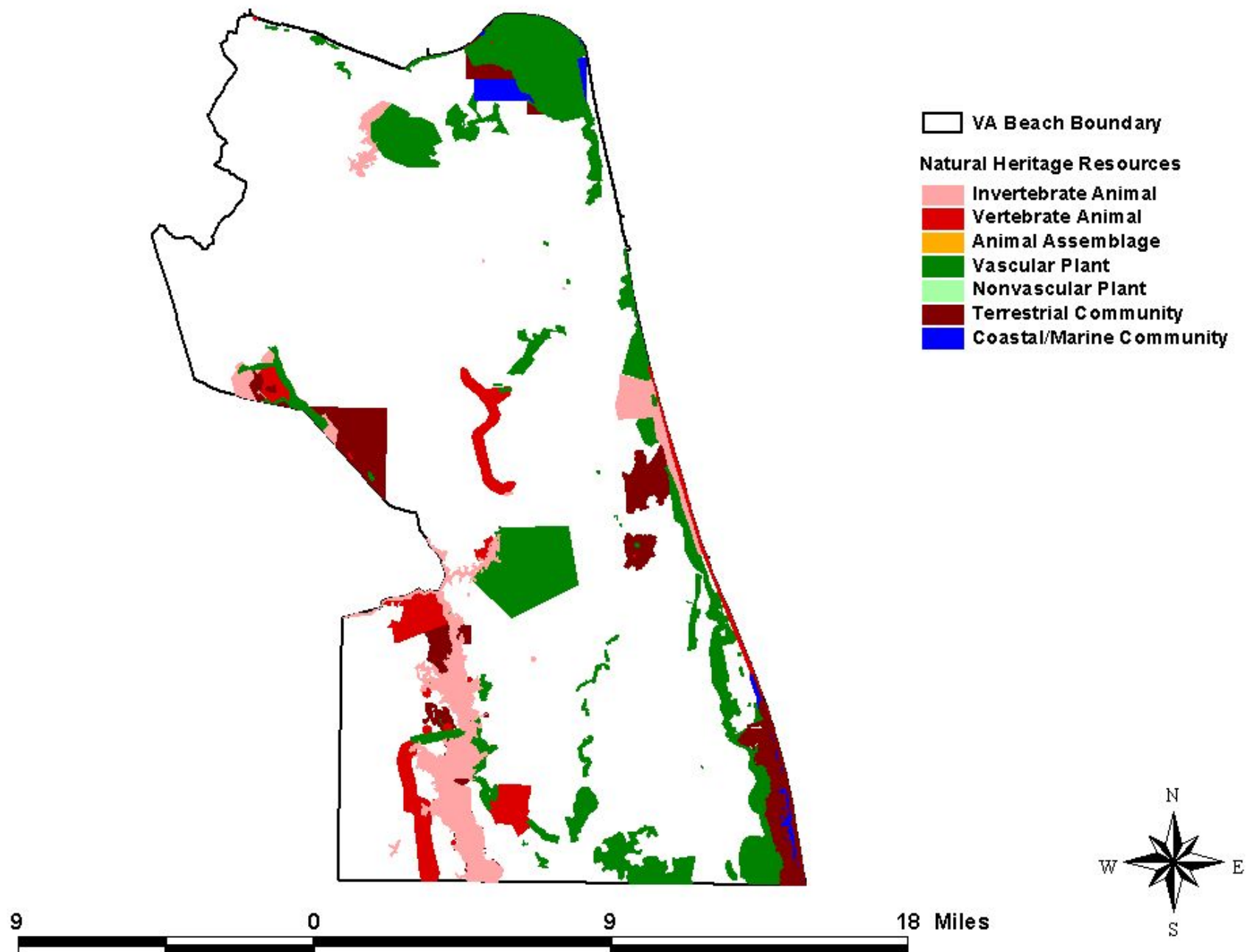


Eastern Big-eared Bat
(G3G4/S1/SOC/LE)

Dismal Swamp Southeastern Shrew (G5T4/S2/NL/LT)



Natural Heritage Resources In Virginia Beach

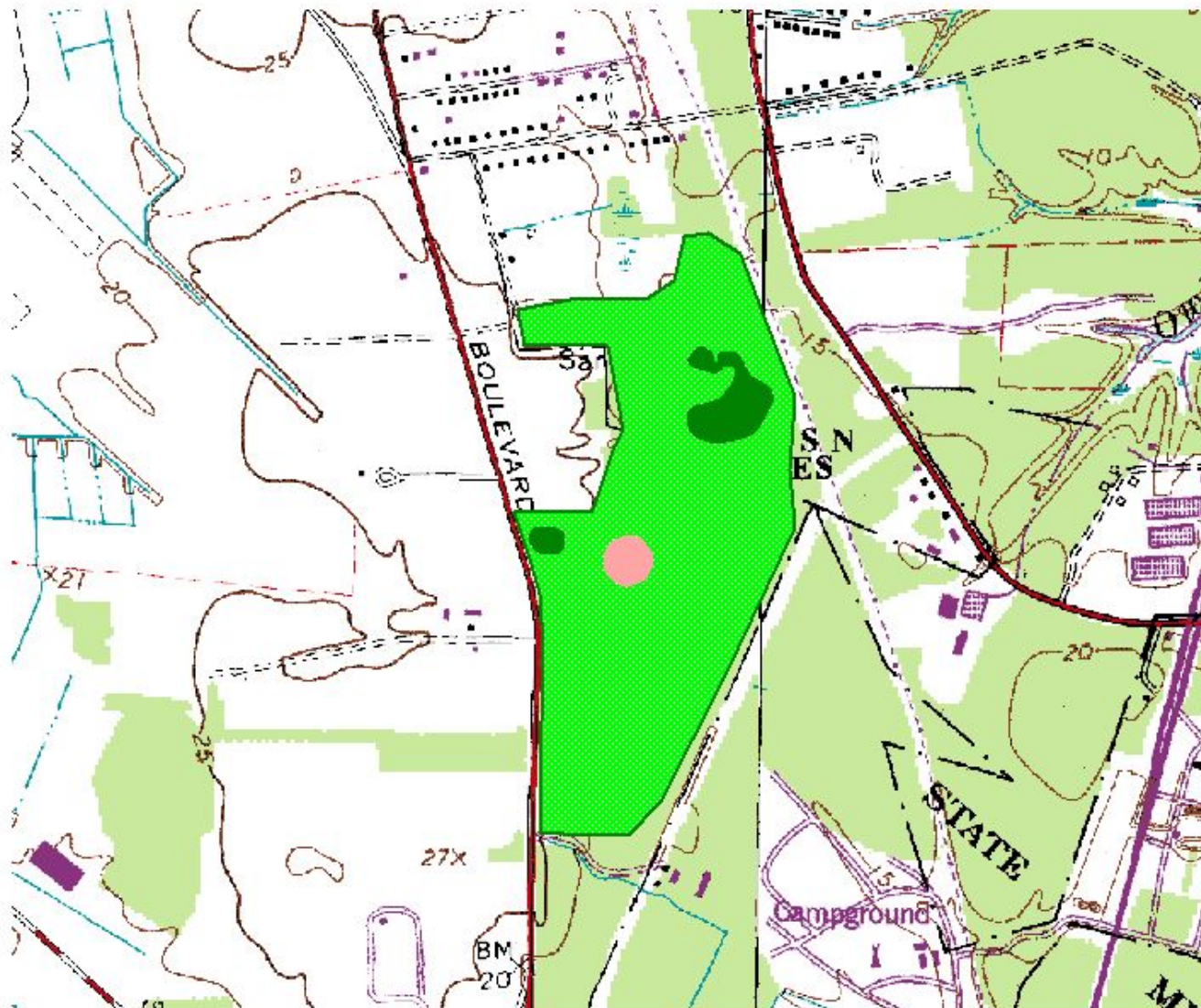




Conservation Sites

- Mapped boundaries that enclose:
 - One or more natural heritage resources, and
 - The surrounding habitat or buffer necessary to protect the resources.
- Represent land that should be considered for protection of the natural heritage resources.
 - Do NOT represent protected lands

Oceana Ponds & Forest Conservation Site (Natural Heritage Resources Displayed)



- VA Beach Boundary
- Conservation Site
- Natural Heritage Resources
 - Invertebrate Animal
 - Vertebrate Animal
 - Animal Assemblage
 - Vascular Plant
 - Nonvascular Plant
 - Terrestrial Community
 - Coastal/Marine Community

NH Resources Depicted:

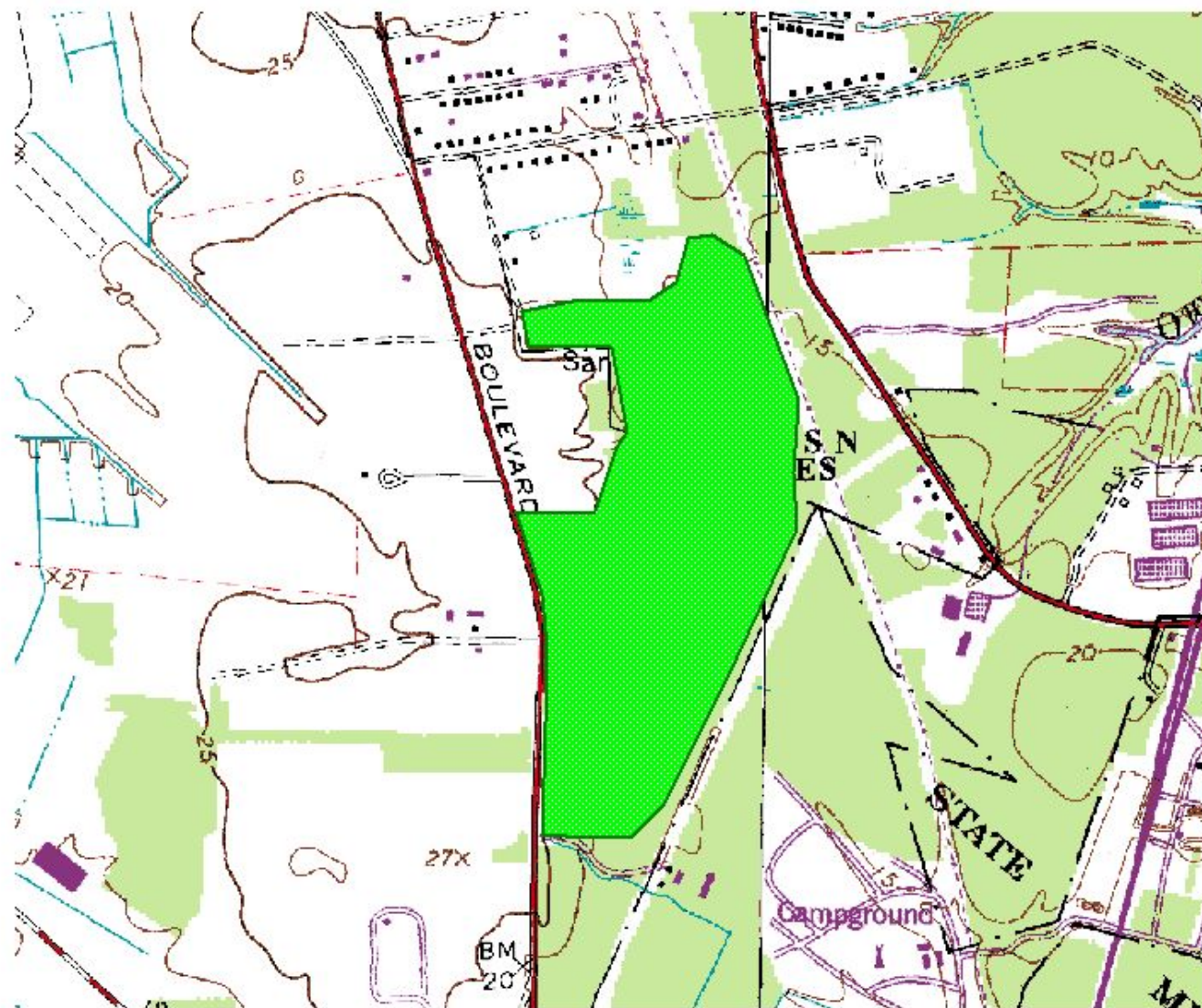
Long Beach Seedbox
(G2G3/S2/SOC/NL)

Southeastern Cane Borer
Moth (G4/S2S3/NL/NL)

0.4 0 0.4 0.8 Miles

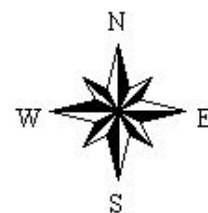


Oceana Ponds & Forest Conservation Site



- VA Beach Boundary
- Conservation Site

0.4 0 0.4 0.8 Miles





Conservation Site Boundaries

- Conservation site boundaries include the full extent of known NH resources, and can also include:
 - Adjacent associated habitat
 - Buffer from adjacent disturbance, predation, or invasive species risks
 - Additional land that may be necessary for effective stewardship, e.g.:
 - Management of direct impacts to hydrology or water quality.
 - Sufficient area to manage prescribed burn, for fire-dependent species
- Boundaries are reviewed and modified based on:
 - New NH resource information
 - Updated habitat information



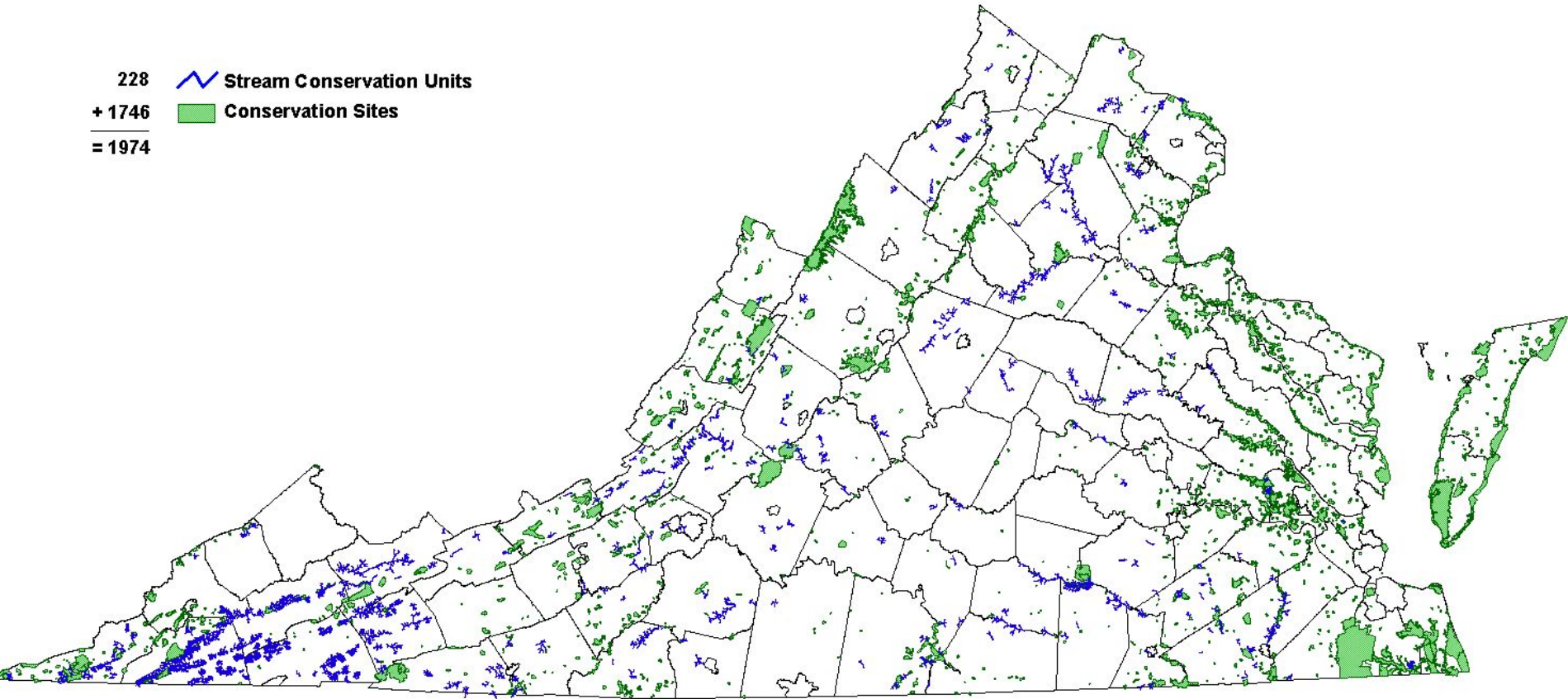
Sources of Conservation Site Boundaries

- Detailed conservation site plans contained in DNH technical reports
 - Developed through:
 - Comprehensive inventory work or
 - Conservation planning work
- Biologists' field notes,
- Aerial photography, and/or
- Other in-office resources

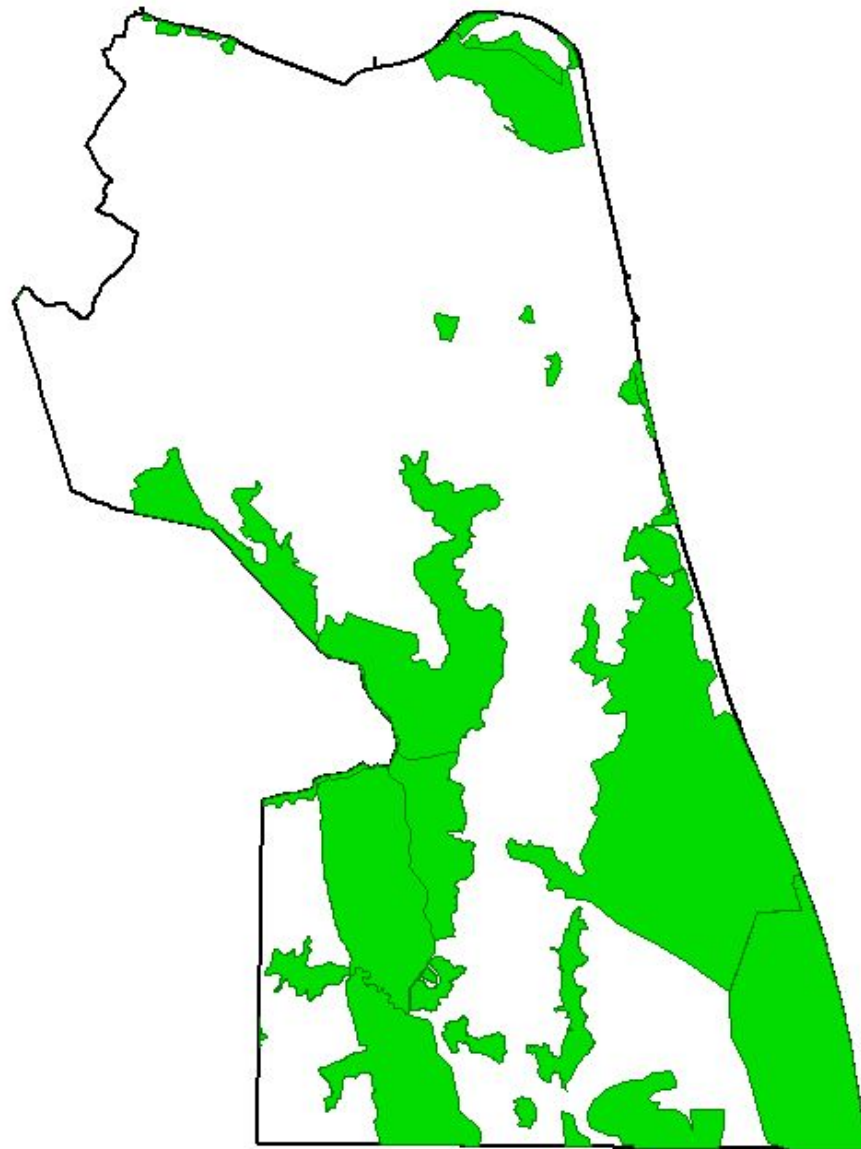
Conservation Sites and Stream Conservation Units in Virginia

228
+ 1746
= 1974

Stream Conservation Units
Conservation Sites

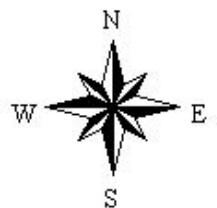


Natural Heritage Conservation Sites In Virginia Beach

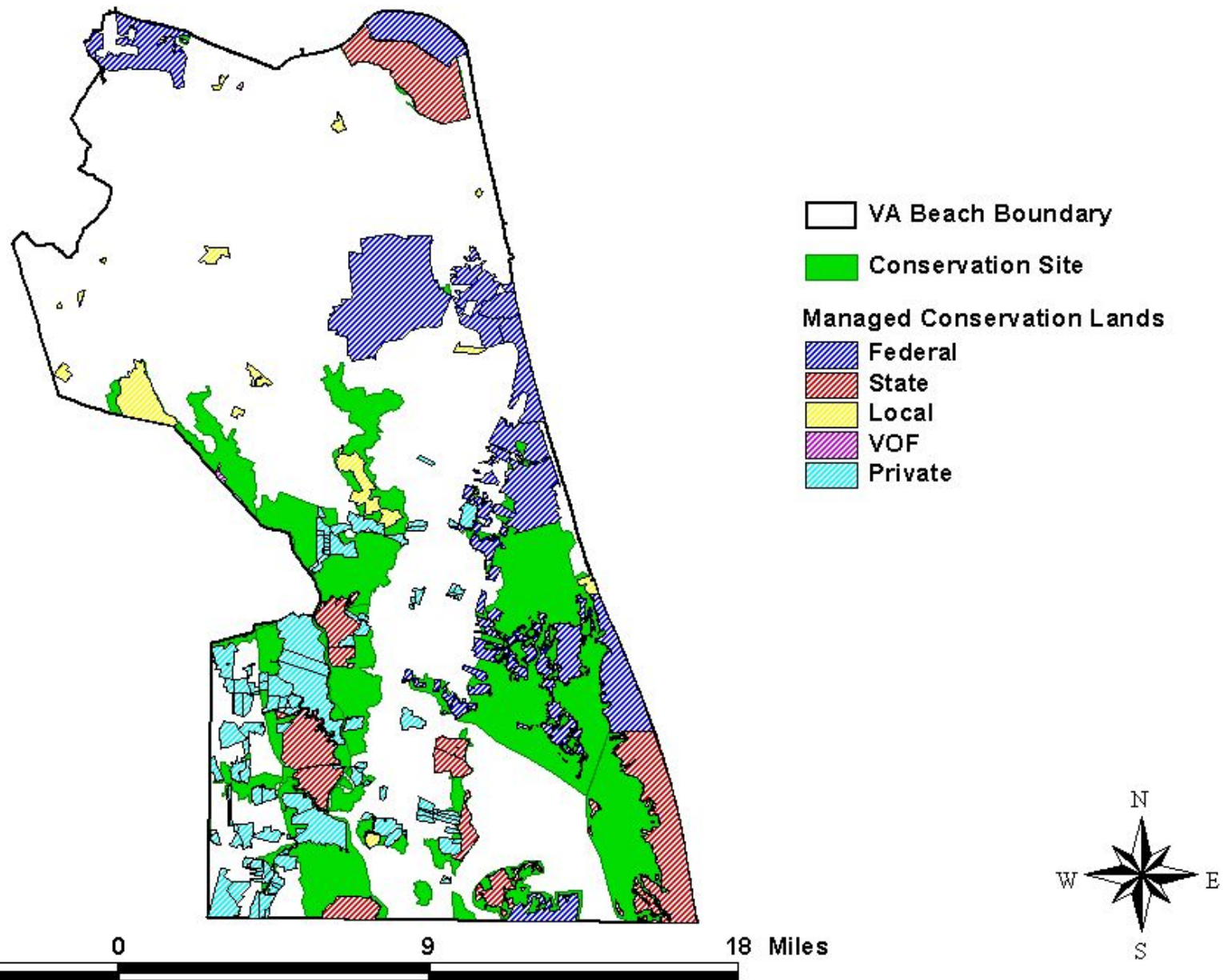


-  VA Beach Boundary
-  Conservation Site

9 0 9 18 Miles

A horizontal scale bar with alternating black and white segments, used to indicate distance in miles.

NH Conservation Sites Vs. Managed Conservation Lands In Virginia Beach





Biodiversity Ranking

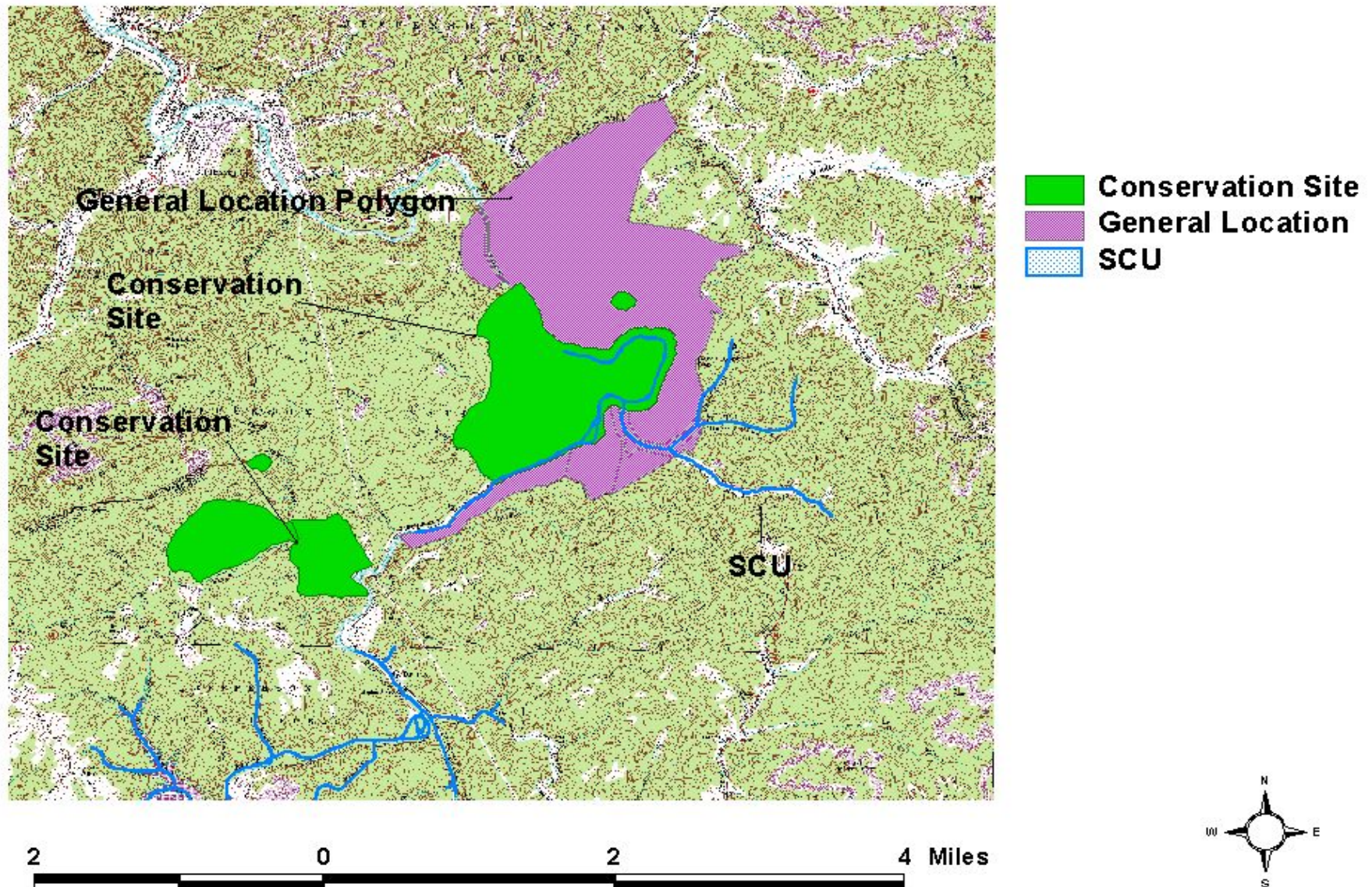
- Each conservation site is given a biodiversity significance rank (B-rank) based on:
 - Rarity
 - Quality
 - Number of natural heritage resources
- Scale of 1-5, 1 being most significant:
 - B1 - Outstanding significance
 - B2 - Very high significance
 - B3 - High significance
 - B4 - Moderate significance
 - B5 - General significance



General Locations of NH Resources

- Documented occurrences whose locations are not precisely known or recently verified
- Suggest potential for rare species to occur
- Displayed as polygons not associated with a conservation site

General Locations of Natural Heritage Resources and Conservation Sites





Uses of Conservation Sites Data

- Screening projects for potential impacts
- Local and regional planning
 - Comprehensive Plan
 - Overlay District
- Targets for acquisitions and easements
 - PDR/TDR Programs
- Guide priorities for restoration activities
- Key factor in Virginia Conservation Lands Needs Assessment (VCLNA)



DCR-DNH Screening Process

- The project boundaries are digitized in Arcview environmental review project
- A 2 mile radius is created from the digitized project boundaries
- The buffer intersects with the natural heritage resources layer
- If a hit occurs, DCR-DNH staff determines potential adverse impact from the proposed project and makes recommendations when appropriate
- DCR staff can also comment on potential habitat in areas that have not been inventoried for natural heritage resources.



Virginia Natural Heritage Data Explorer

- Allows internet users to conduct basic GIS functions on a remote website
- Requires only Microsoft Internet Explorer web browser and minimal instruction to operate
- Alternative to receiving digital data to integrate into existing GIS system
- Available on a subscription basis to organizations only
- There is a charge to for-profit organizations
- Found at www.vanaturalheritageexplorer.org

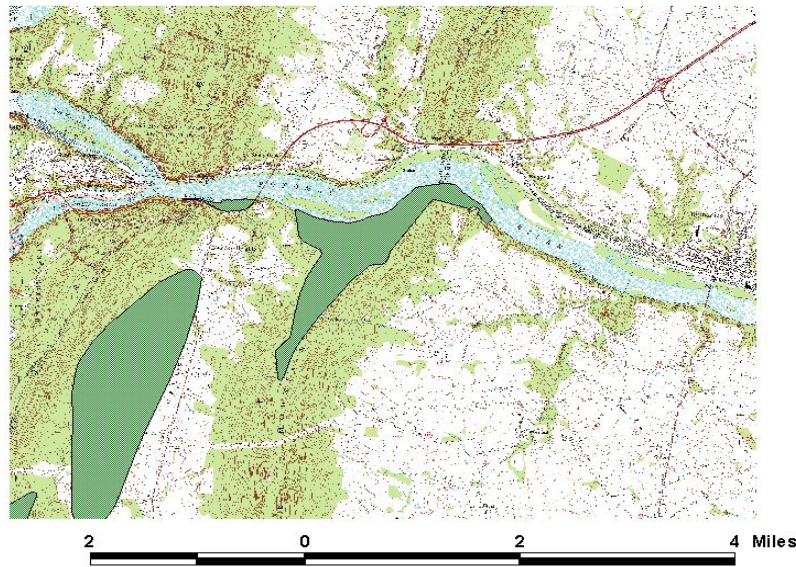


Virginia Natural Heritage Data Explorer

Features powerful GIS capabilities, including:

- An interactive map that can display a variety of geospatial data layers, including locality boundaries, roads, streams, watershed boundaries, conservation lands, and topographic and aerial photography backgrounds.
- Change the scale and location of map displays
- Select and identify specific features
- Print simple maps
- Create boundaries and labels for specific project locations that will display with other map features
- Identify presence of natural heritage resources within a two mile buffer around a specific project location
- Submit projects for review to DCR through the website; receive an automatic response, including a formal letter, if no natural heritage resources are found

Tier II Digital Data



Conservation Sites
 Conservation Site
 Habitat Zone
 SCU

Natural Heritage Screening Coverage

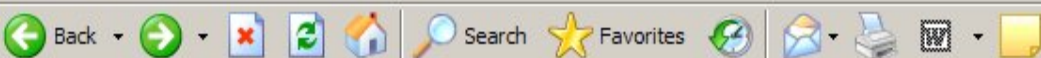
■ Conservation Sites

■ *Attributes:* Sitename, Brank, Acreage, Presence of listed species

■ EOs associated with each site are identified, but exact locations are not provided

■ General Locations of Natural Heritage Resources

For localities, PDCs and regulatory partners



Address http://www.vanaturalheritageexplorer.org/login.aspx



Links >>

Google Search 0 blocked Check AutoLink AutoFill Options



Virginia Natural Heritage Data Explorer



Welcome to the Department of Conservation and Recreation's Virginia Natural Heritage Data Explorer. This is a subscriber-only website, [available to organizations \(agencies, companies, and non-profits only\)](#). If you would like [your organization](#) to apply to be a subscriber click [here](#).

To visit the public website of DCR's Natural Heritage Program, with its wealth of information on Virginia's natural heritage resources, and to search our databases at the county, watershed, or species/community level, click [here](#).

UserName:

Log In

Password:

A Password Must Be Entered to Login.

Note that this service is designed to work only with Microsoft Internet Explorer version 5.5 or higher. Click [here](#) for a list of IE settings that need to be made to fully enable the functionality.



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☐ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation
Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

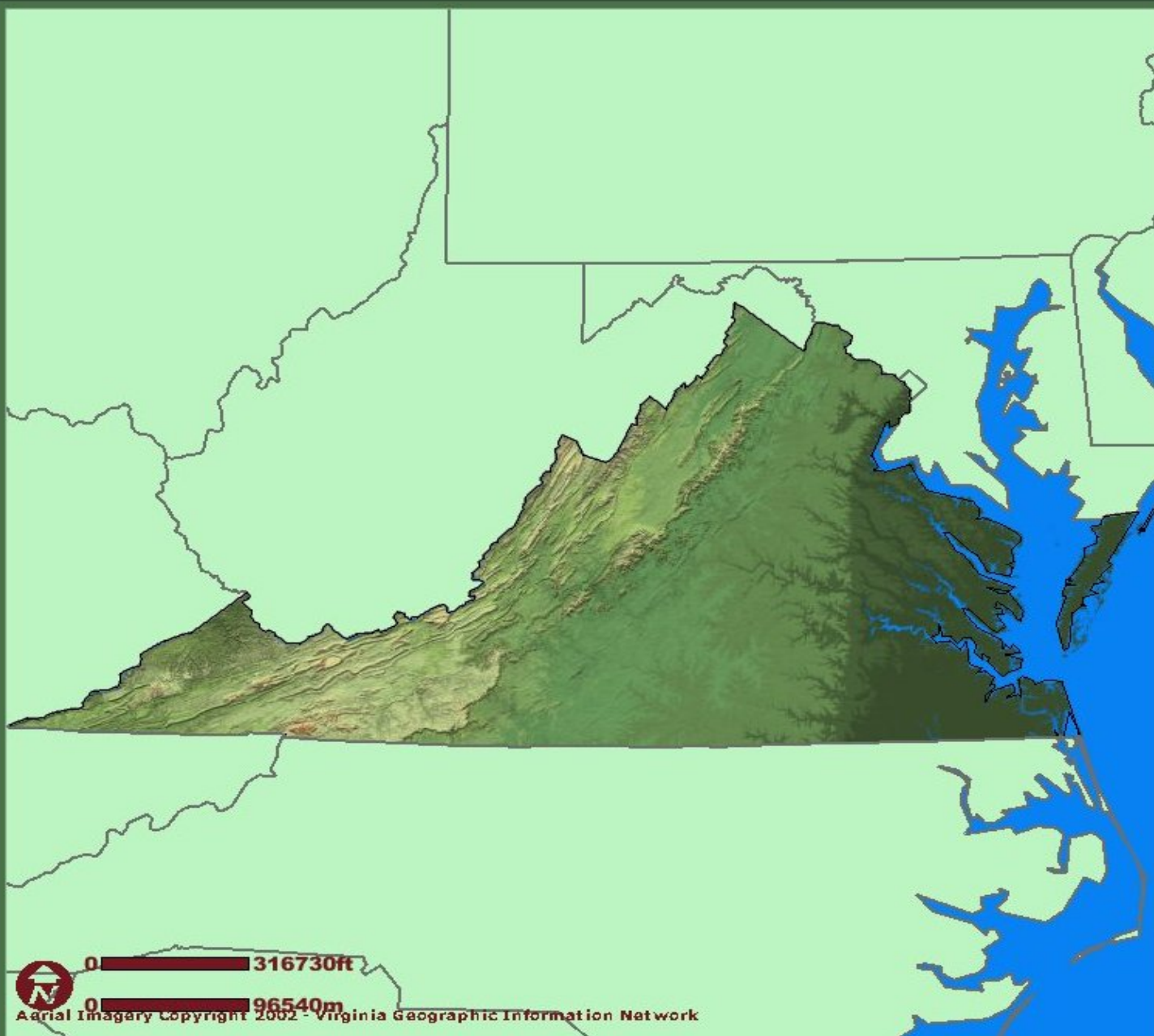
☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation




Layers

Legend

NH Screening Layer

-  Conservation Site
-  GLNHR
-  Karst Screen
-  SCU
-  Counties
-  States
-  Virginia
-  <all other values>

Elevation



0 20779ft

0 6333m

Aerial Imagery Copyright 2002 - Virginia Geographic Information Network

Zoom In

Subhydrologic Units

1: 249346

Zoom To

Latitude/Longitude

Lat (Easting):

Long (Northing):

GO



Layers

Legend

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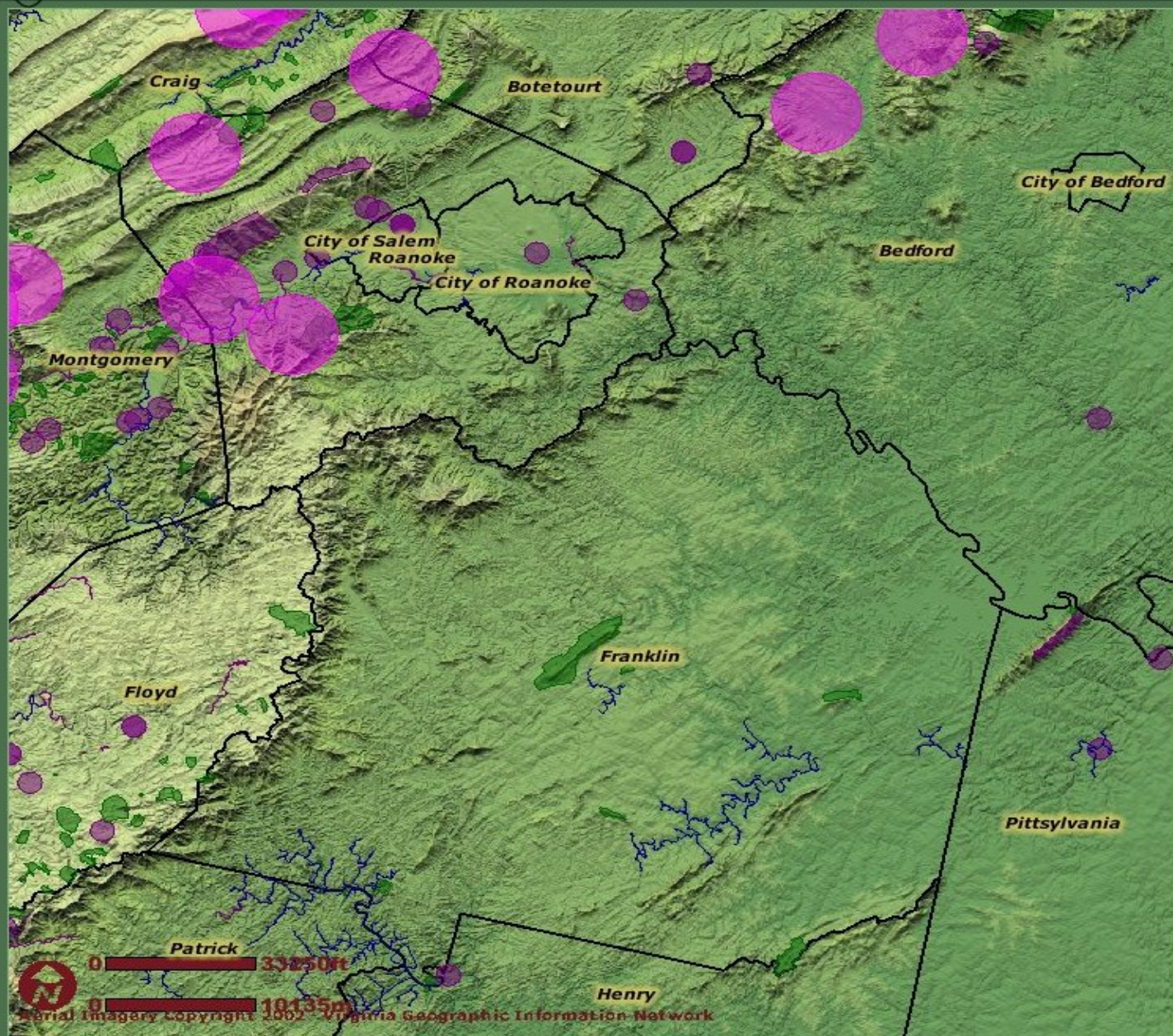
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☒ Elevation


0 3.3850m

0 10.135m

Serial Imagery Copyright 2002 Virginia Geographic Information Network



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Karst Research

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- ☐ Dye Trace Vectors

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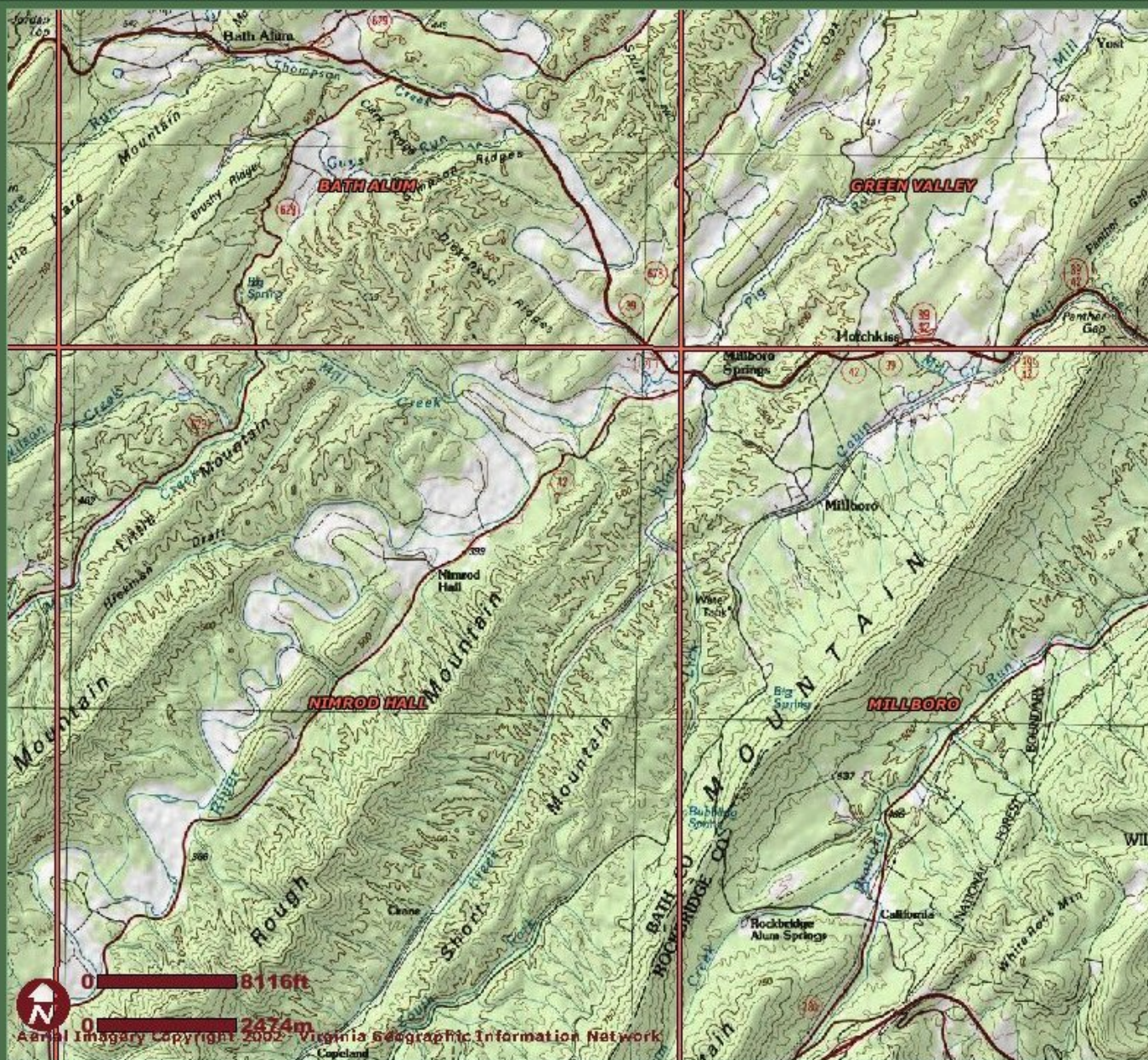
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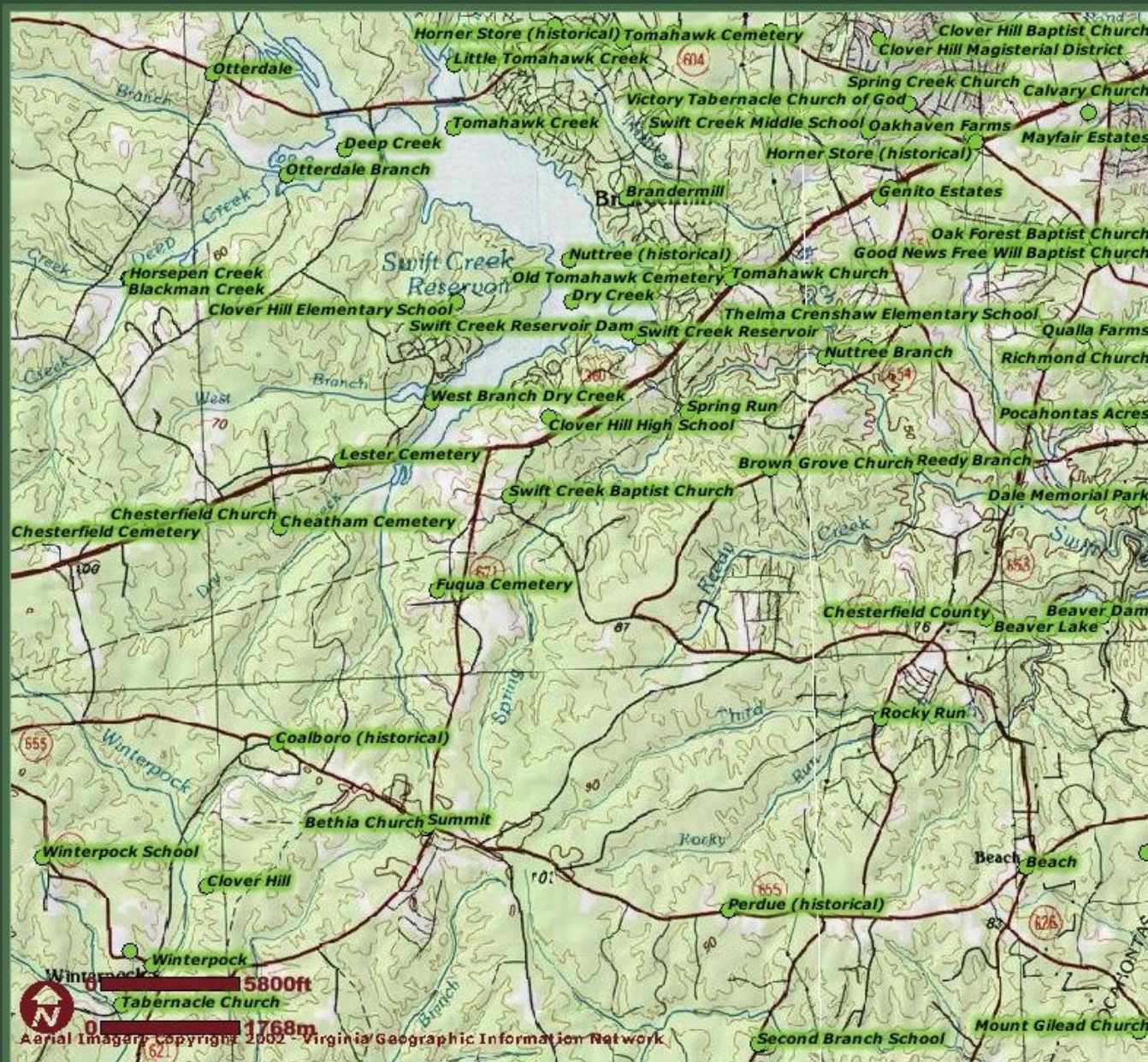
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☒ 24k TOPO


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[Zoom In](#)
[USGS Placenames](#)

1: 69595

[Zoom To](#)

Latitude/Longitude

Lat (Easting):

Long (Northing):

GO



Layers **Legend**

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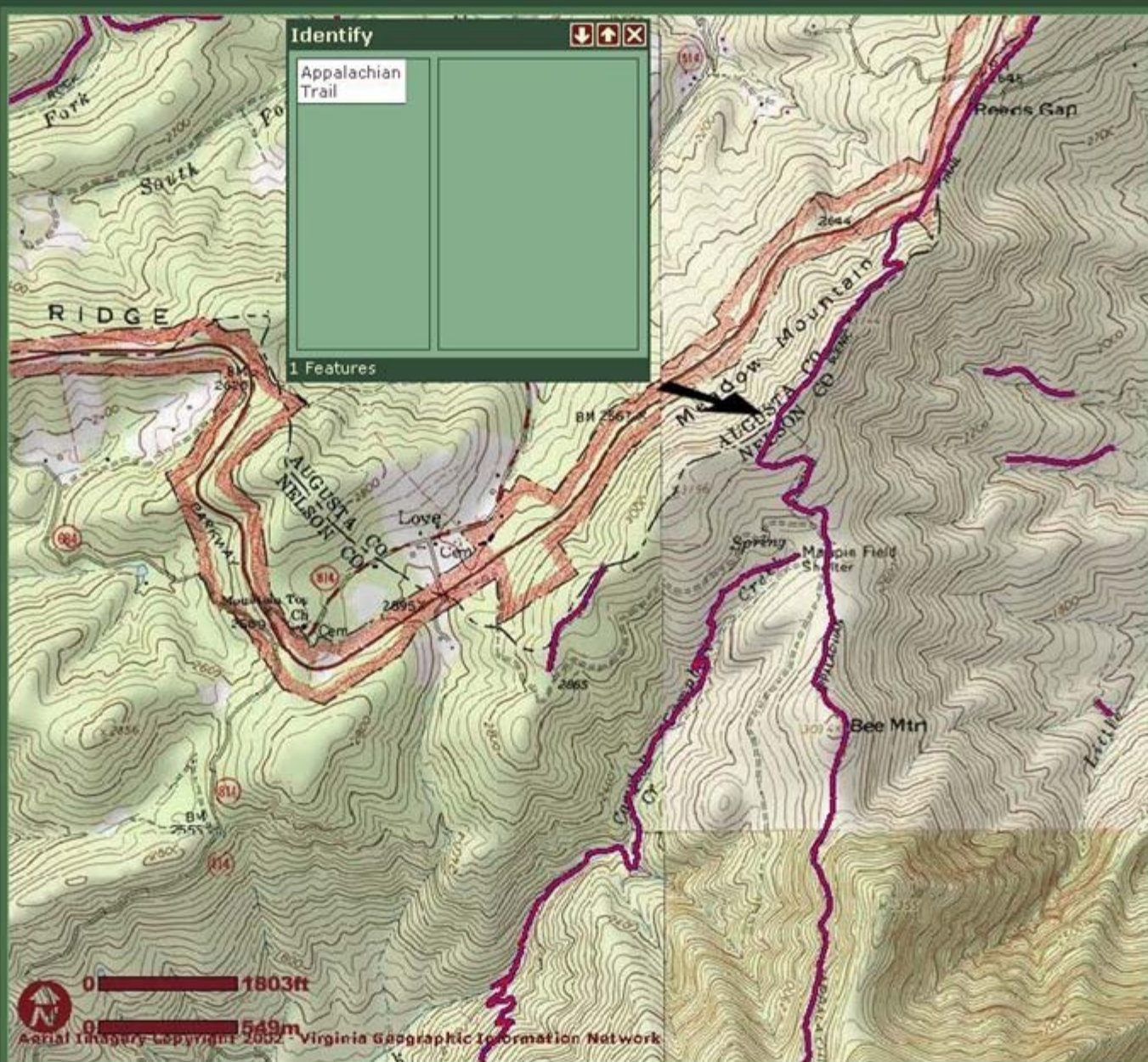
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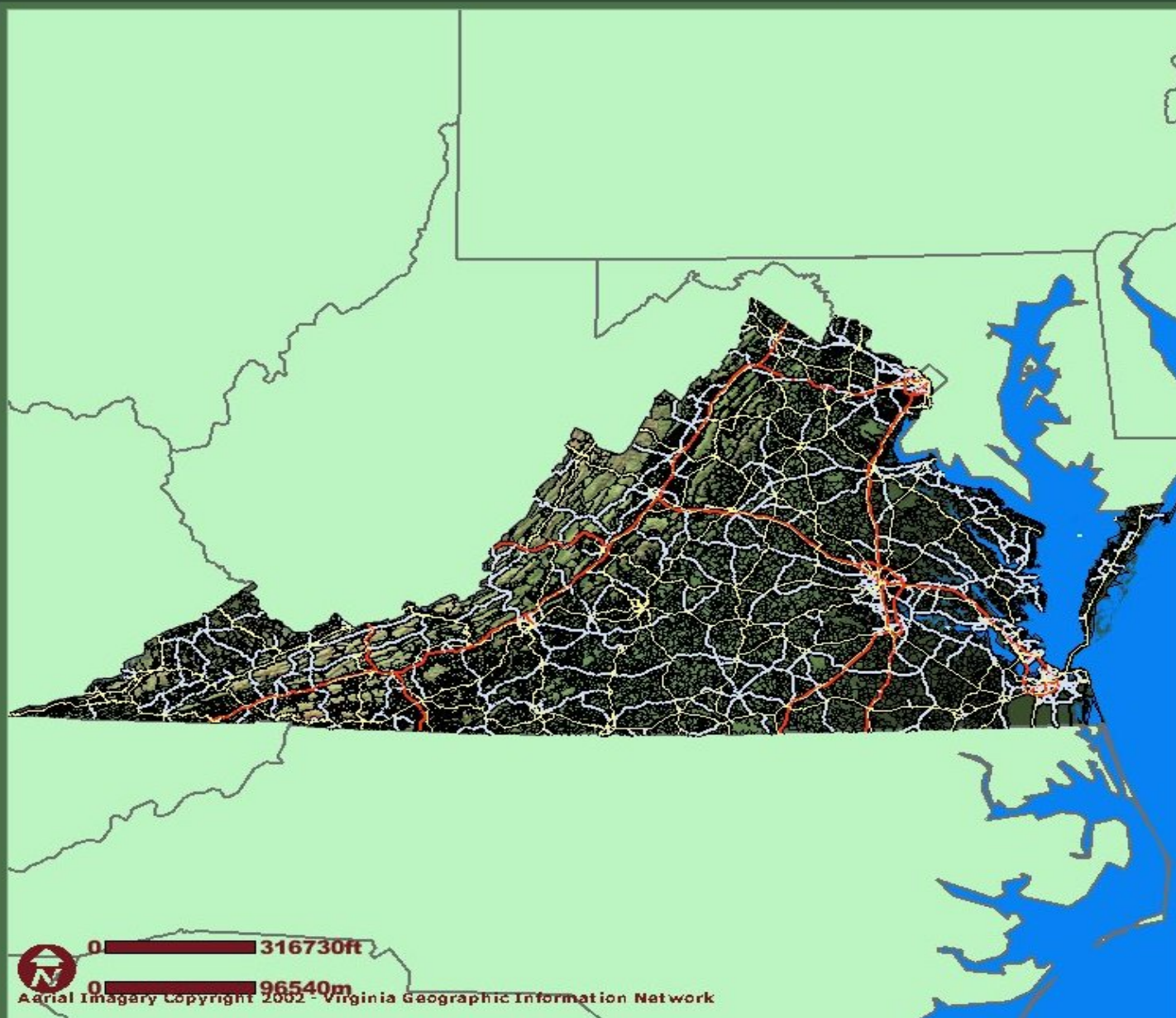
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Base Layers

☐ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation

[Zoom In](#)
[NH Screening Layer](#)

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Long (Northing):

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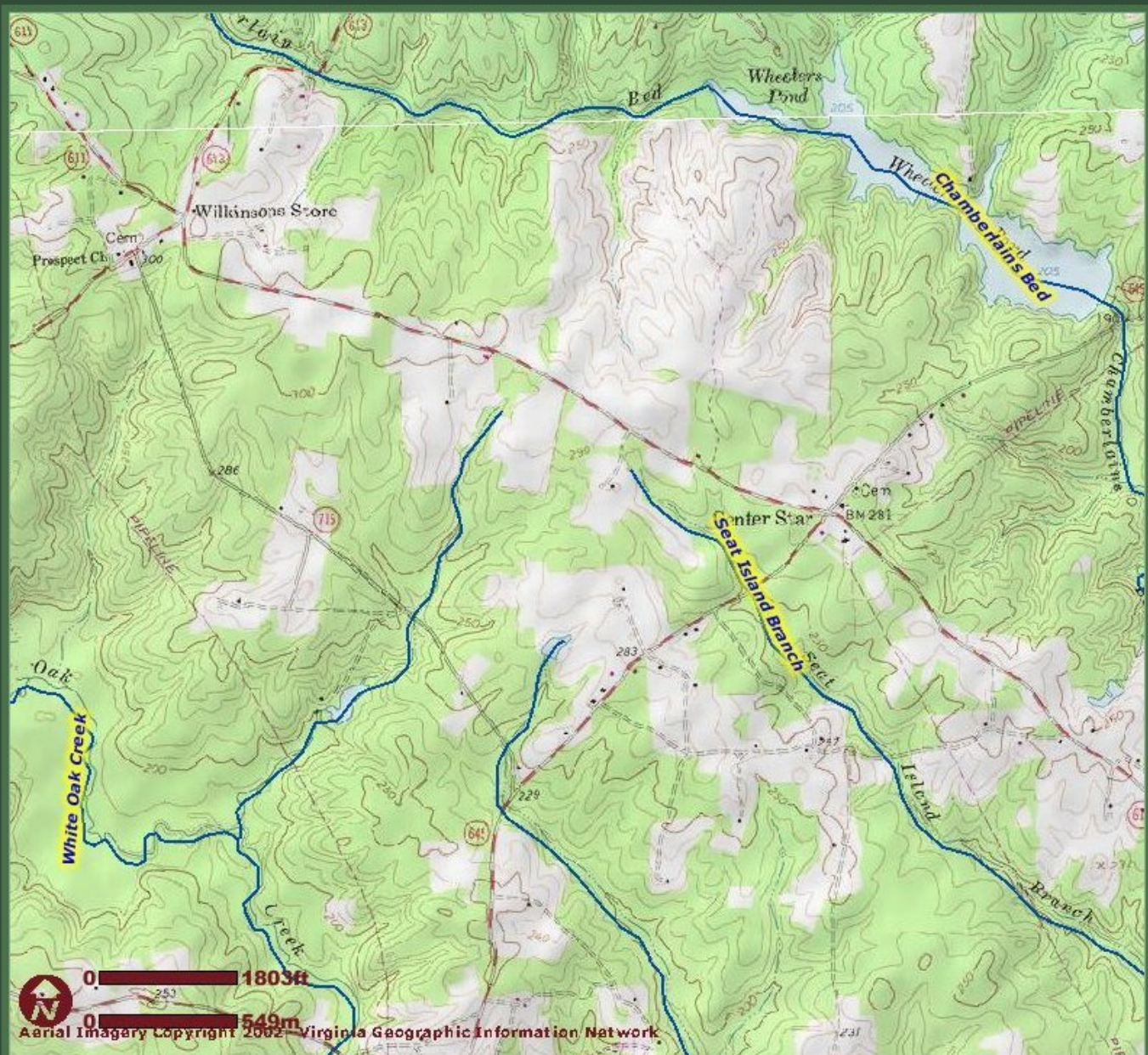
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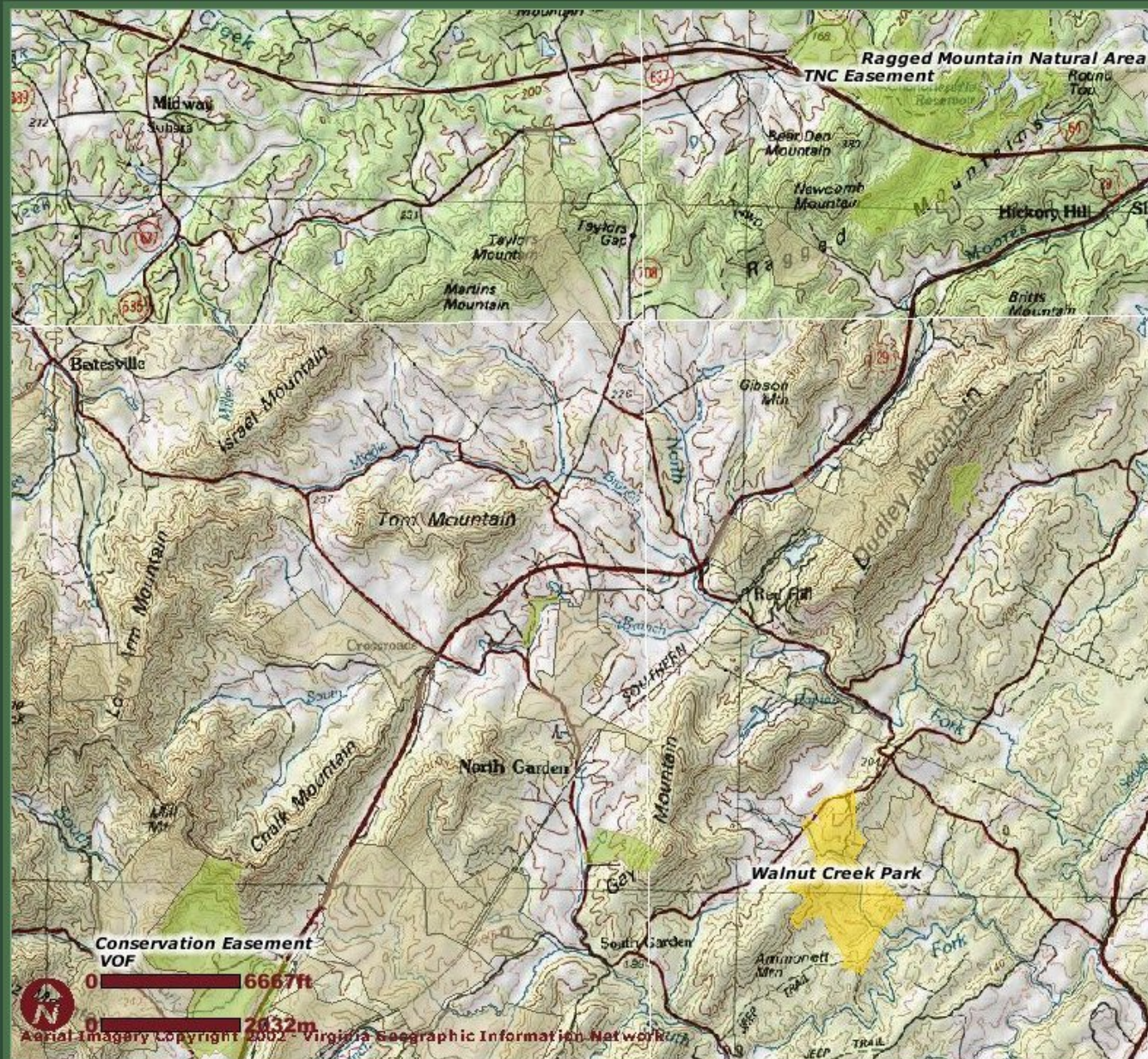
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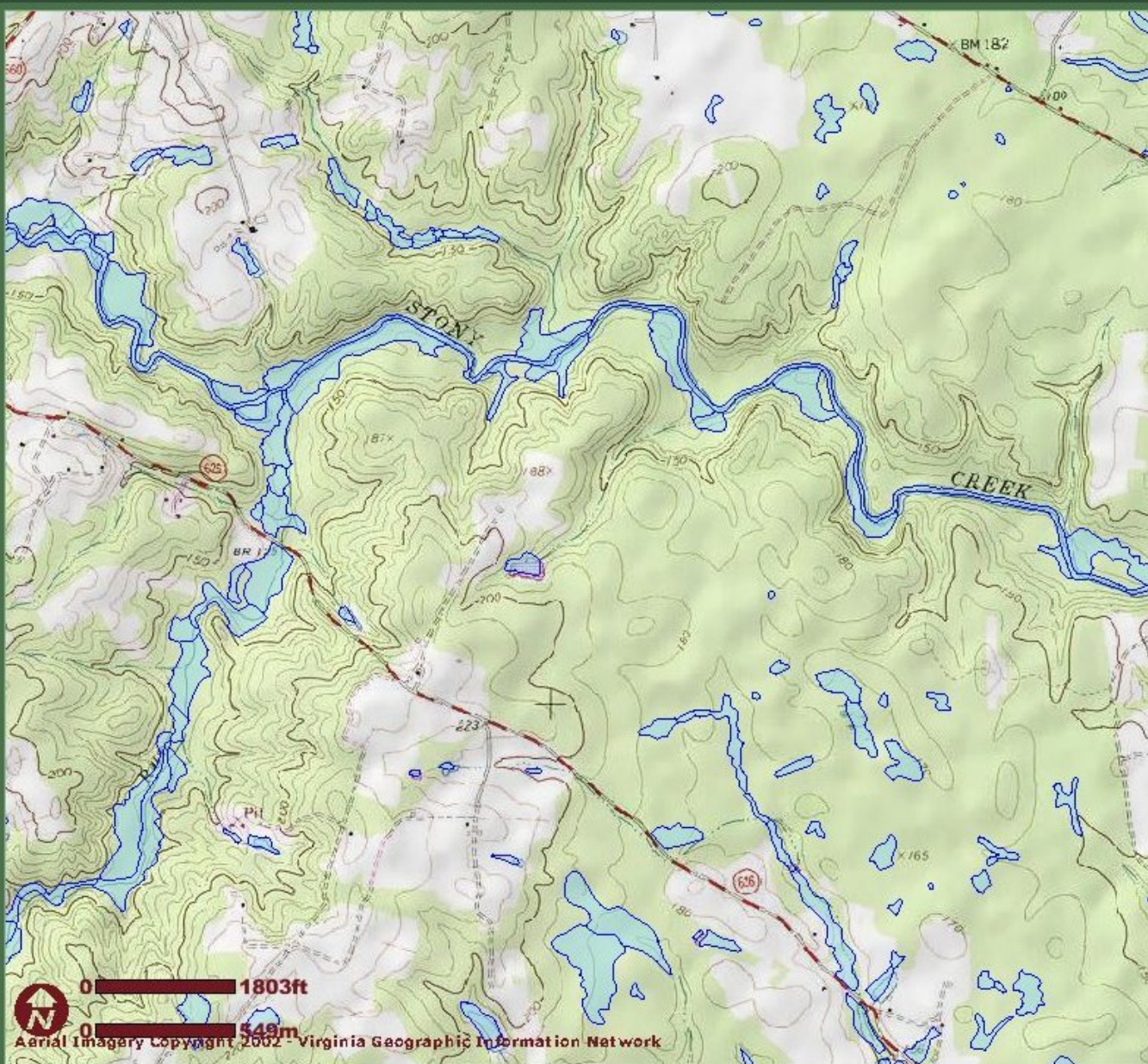
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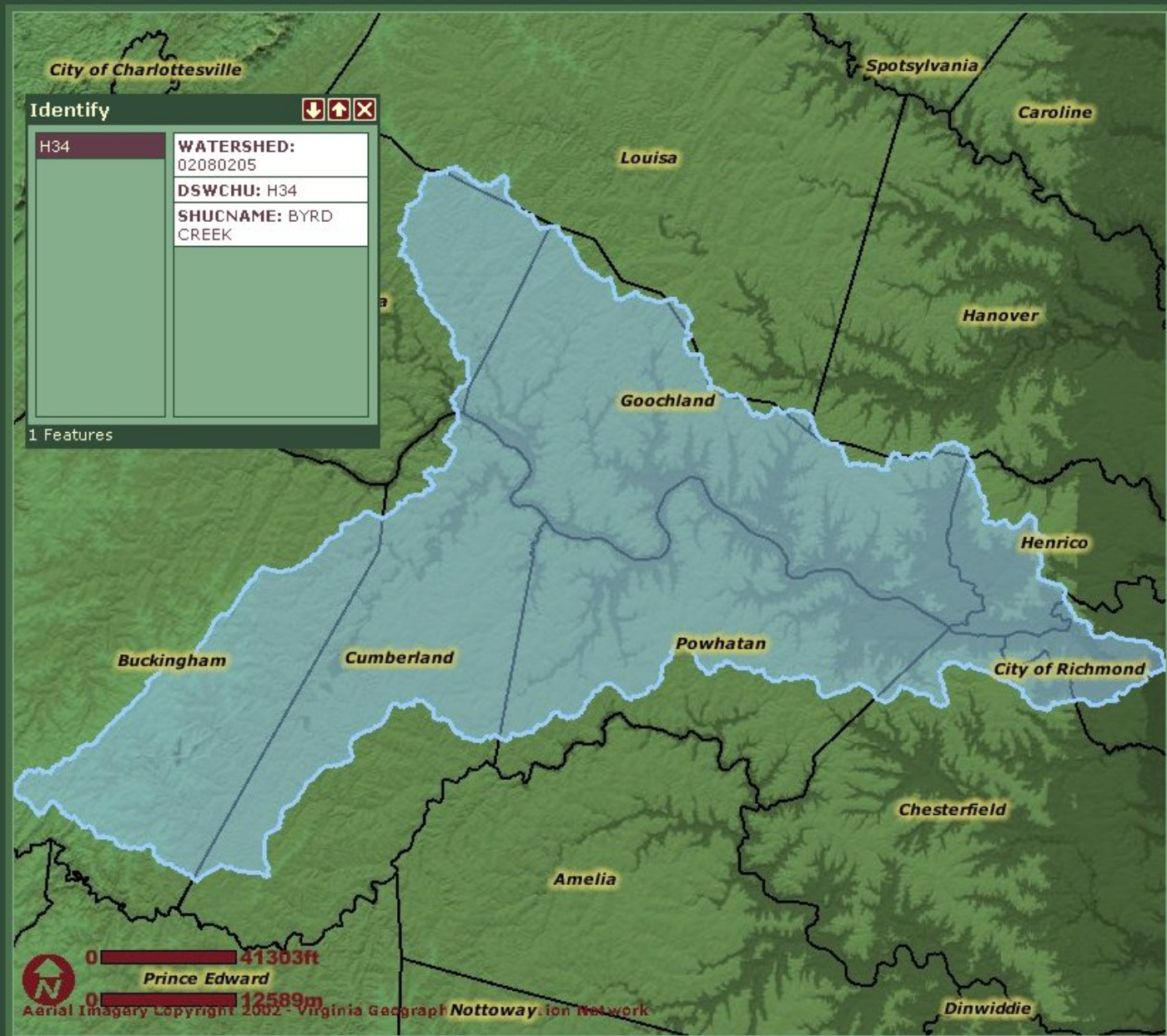
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☐ Managed Conservation Lands

☒ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☒ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

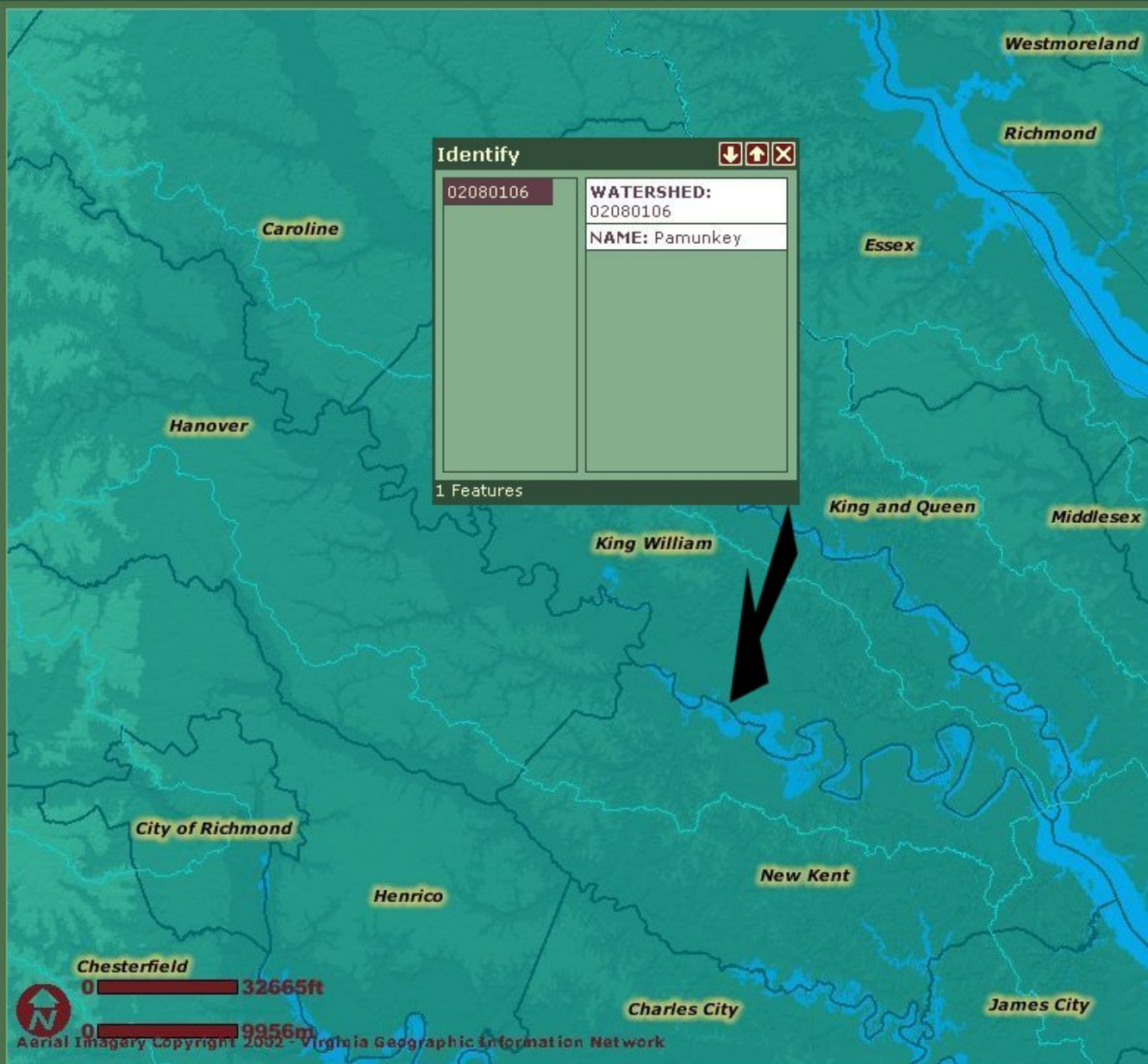
☒ Counties

☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO


[Identify](#)
[8-Digit USGS Watersheds](#)

[Zoom To](#)

[GO](#)



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☐ NH Screening Layer

☐ Diabase Screening Layer

Karst Research

☐ Dye Inputs

☐ Monitor Points

☐ Dye Trace Vectors

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☒ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☒ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO

Identify

Ridge and Valley

PHYSPROV: RV

NAME: Ridge and Valley

1 Features



0 103381ft

0 31511m

Aerial Imagery Copyright 2002 - Virginia Geographic Information Network



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☐ NH Screening Layer

☐ Diabase Screening Layer

Karst Research

☐ Dye Inputs

☐ Monitor Points

☐ Dye Trace Vectors

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☒ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☒ Planning Districts (PDC)

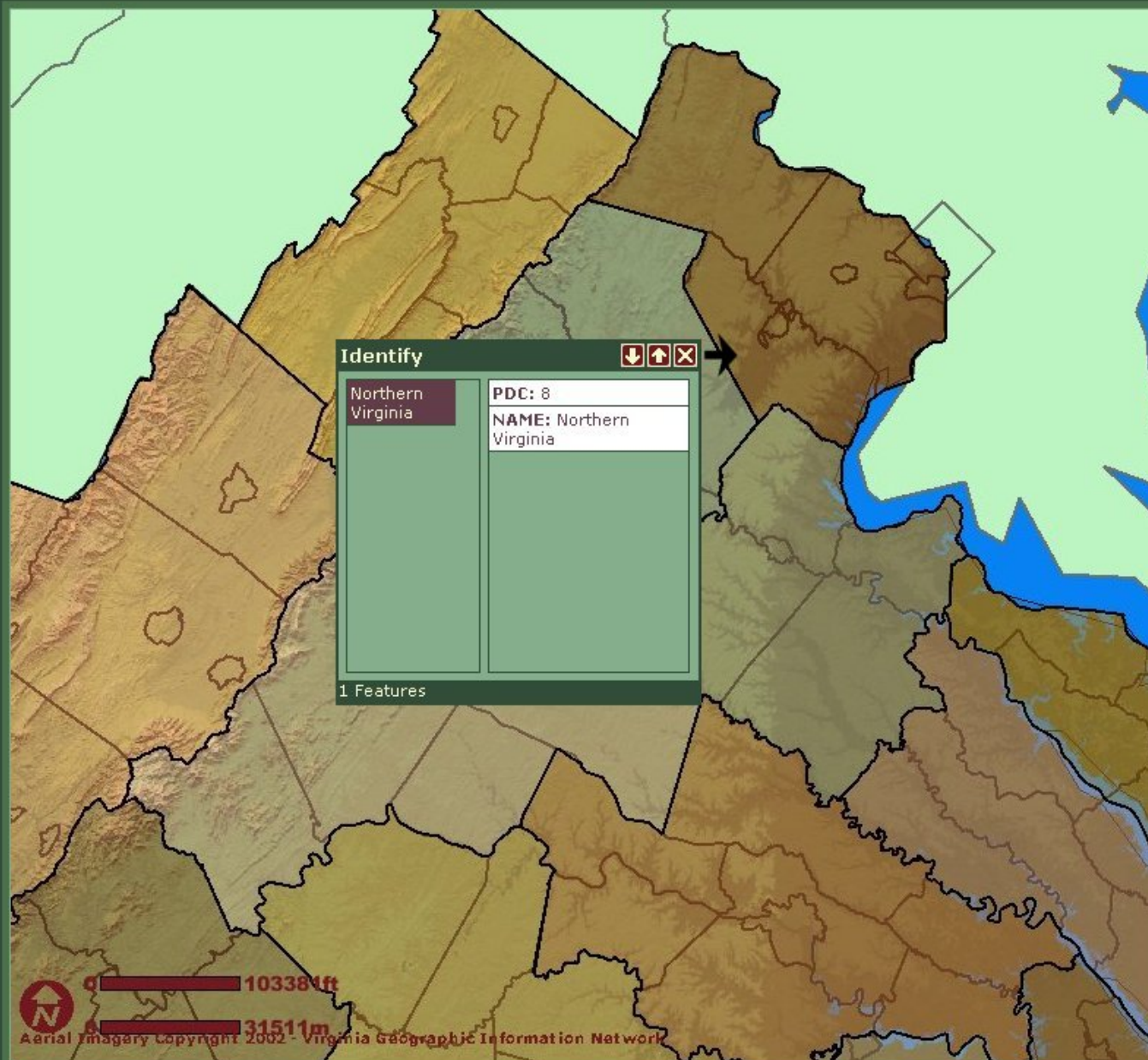
☒ Counties

☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO



Identify

Planning Districts (PDC)

1: 1240579

Zoom To

Lat (Easting):

Long (Northing):

GO



Layers Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

☒ States

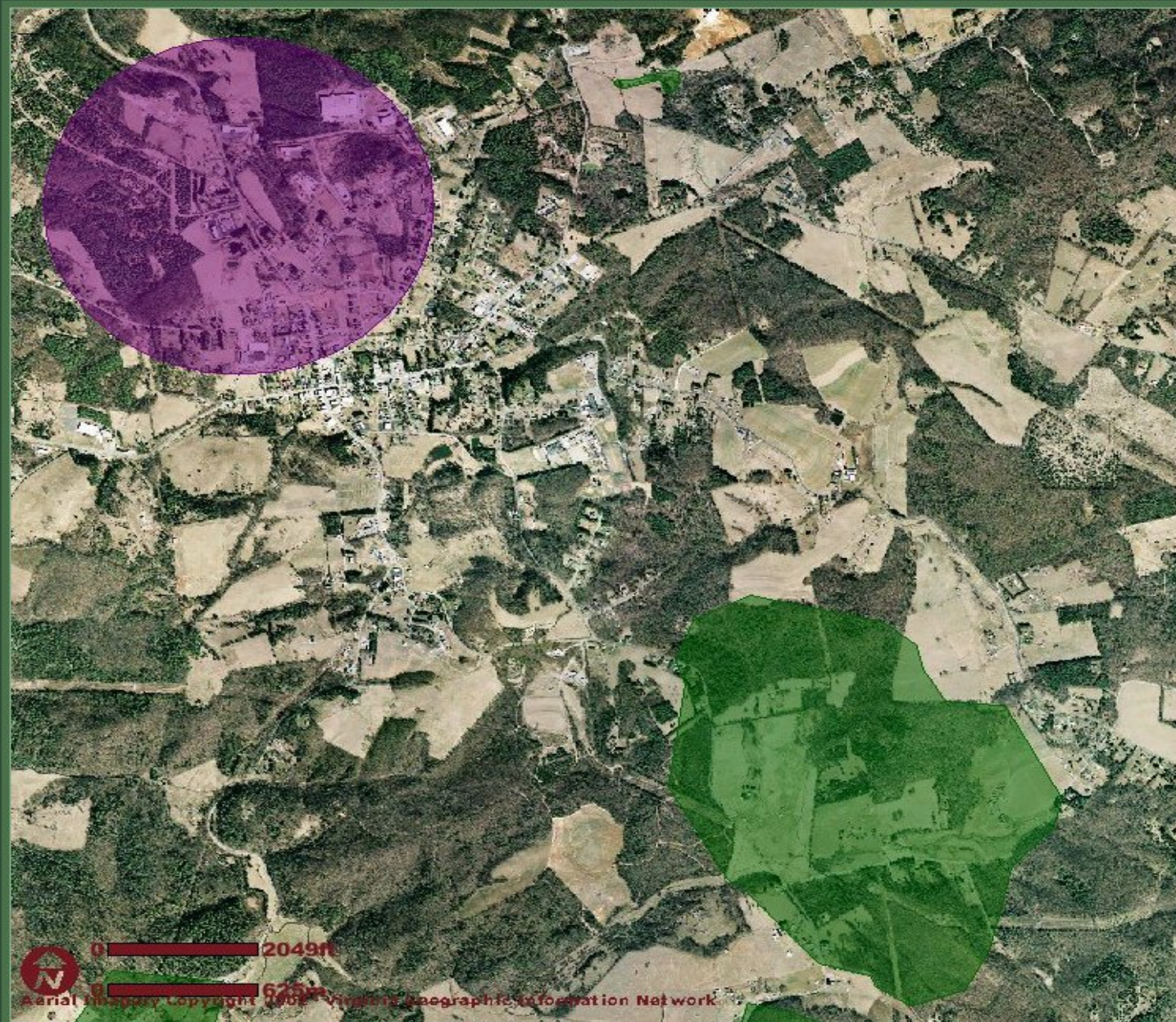
Base Layers

☒ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation



Pan

NH Screening Layer

1: 24587

Zoom To

Latitude/Longitude

Lat (Easting):

Long (Northing):

GO



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

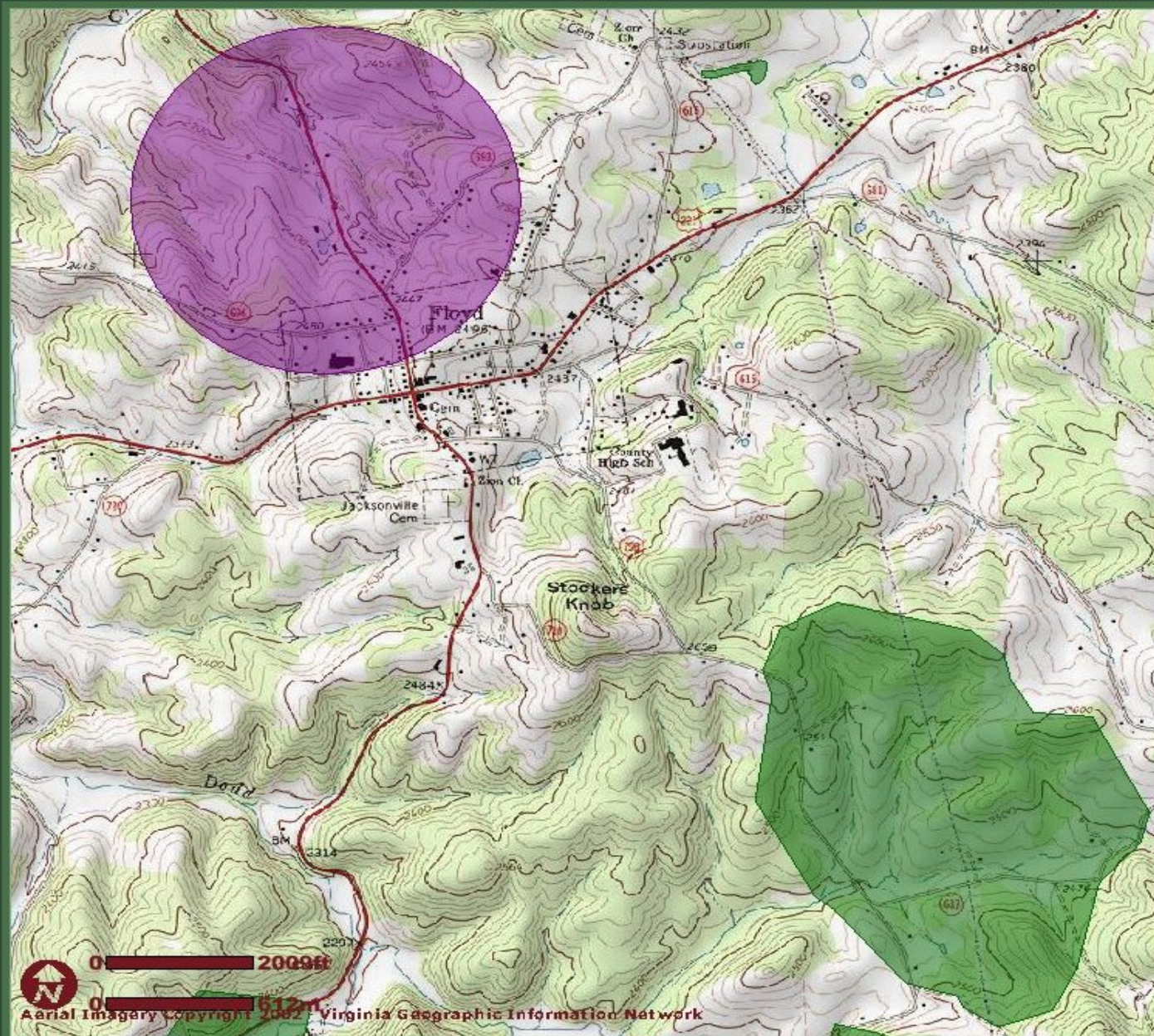
☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation




Layers

Legend

Labels

Natural Heritage Resources

☐ NH Screening Layer
 ☐ Diabase Screening Layer

Karst Research

☐ Dye Inputs
 ☐ Monitor Points
 ☐ Dye Trace Vectors

Reference Layers

☐ DRG Quad Grid
 ☐ USGS Placenames
 ☐ Trails
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 ☐ Planning Districts (PDC)
 ☒ Counties
 ☒ States

Base Layers

☐ VBMP Imagery
 ☒ 24k TOPO
 ☒ 100k TOPO
 ☒ Elevation





Layers

Legend

Labels

- ☐ Conservation Lands Labels

Natural Heritage Resources

- ☒ NH Screening Layer
- ☐ Diabase Screening Layer

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- ☐ NHD Streams
- ☐ Managed Conservation Lands
- ☐ NWI Wetlands


Boundaries

- ☐ Subhydrologic Units
- ☐ 8-Digit USGS Watersheds
- ☐ Physiographic Provinces
- ☐ Planning Districts (PDC)
- ☒ Counties
- ☒ States

Base Layers

- ☐ VBMP Imagery
- ☒ 24k TOPO

Results

Zoom To	CONSITE_ID	SITENAME
	2314	ROUTE 649 FIELDS

1 Records



0 1666ft

0 508m

Aerial Imagery Copyright 2002 Virginia Geographic Information Network

Select Polygon

NH Screening Layer

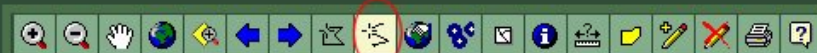
1: 19987

Zoom To

Lat (Easting):

Long (Northing):

GO



Layers

Legend

Labels

- ☐ Conservation Lands Labels

Natural Heritage Resources

- ☐ NH Screening Layer
- ☐ Diabase Screening Layer

Karst Research

- ☐ Dye Inputs
- ☐ Monitor Points
- ☐ Dye Trace Vectors

Reference Layers

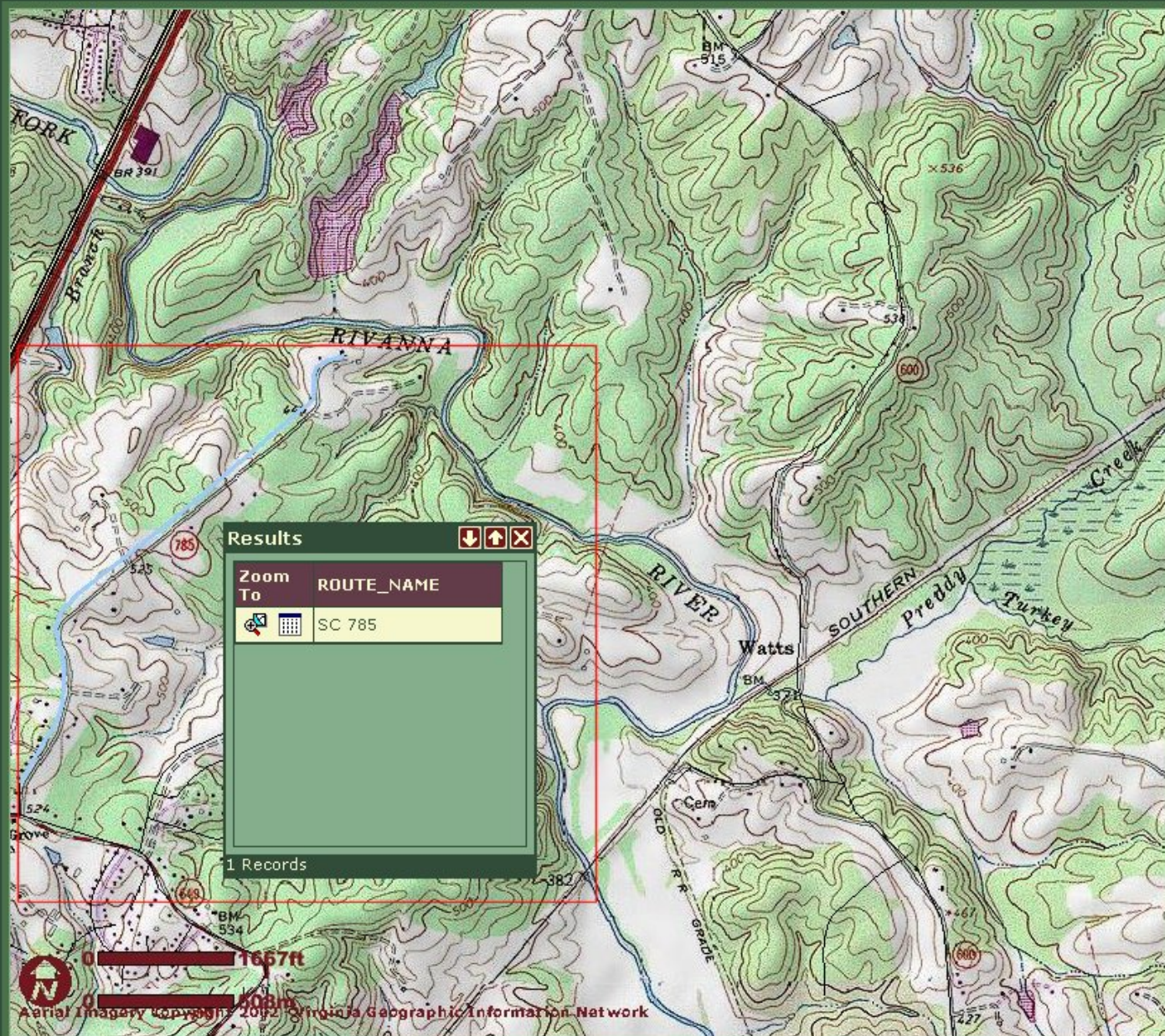
- ☐ DRG Quad Grid
- ☐ USGS Placenames
- ☐ Trails
- ☒ VDOT Roads
- ☐ NHD Streams
- ☐ Managed Conservation Lands
- ☐ NWI Wetlands

Boundaries

- ☐ Subhydrologic Units
- ☐ 8-Digit USGS Watersheds
- ☐ Physiographic Provinces
- ☐ Planning Districts (PDC)
- ☒ Counties
- ☒ States

Base Layers

- ☐ VBMP Imagery
- ☒ 24k TOPO



Select Line

VDOT Roads

1: 20000

Zoom To

Lat (Easting):

Long (Northing):

GO



- Layers Legend
- Labels

☐ Conservation Lands Labels
- Natural Heritage Resources

☒ NH Screening Layer
 ☐ Diabase Screening Layer
- Karst Research

☐ Dye Inputs
 ☐ Monitor Points
 ☐ Dye Trace Vectors
- Reference Layers

☐ DRG Quad Grid
 ☐ USGS Placenames
 ☐ Trails
 ☐ VDOT Roads
 ☐ NHD Streams
 ☐ Managed Conservation Lands
 ☐ NWI Wetlands
- Boundaries

☐ Subhydrologic Units
 ☐ 8-Digit USGS Watersheds
 ☐ Physiographic Provinces
 ☐ Planning Districts (PDC)
 ☒ Counties
 ☒ States
- Base Layers

☐ VBMP Imagery
 ☒ 24k TOPO

Buffer

Select:

NHD Streams

Within 2 Miles of Current Selection

Reset Buffer





Layers Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

☒ States

Base Layers

☒ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation

Search

Layer:

SITENAME

BRANK

LEGSTATUS




TYPE

Reset

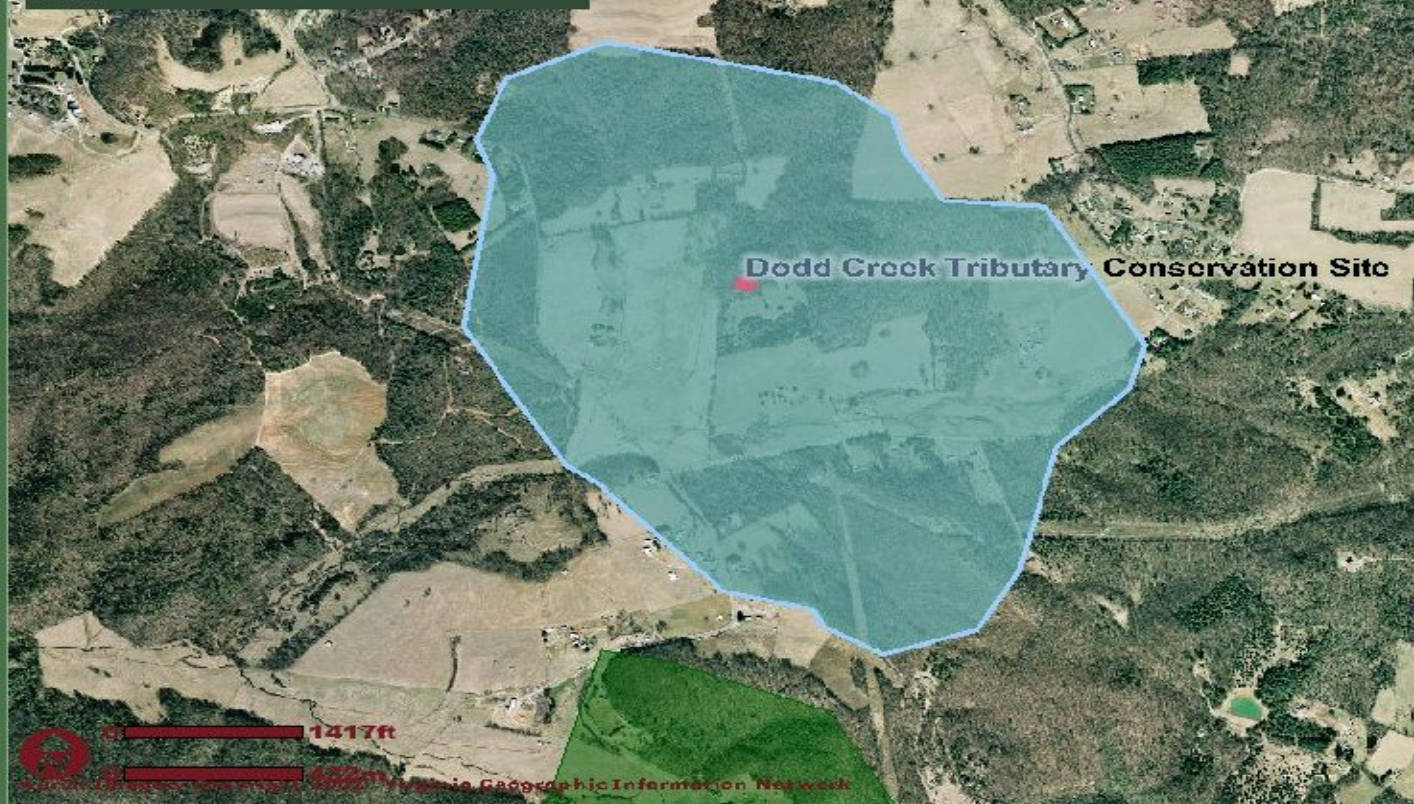
Search

Locator

Results

Zoom To	CONSITE_ID	SITENAME	BRANK	LEGSTATUS
 	884	DODD CREEK X RT. 714 WETLAND	B3	FL
 	1007	DODD CREEK TRIBUTARY	B4	FL

2 Records



Dodd Creek Tributary Conservation Site



1417R
Virginia Geographic Information Network

Add Label

NH Screening Layer

1: 17304

Zoom To

Latitude/Longitude

Lat (Easting):

Long (Northing):

GO



Layers Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

☒ States

Base Layers

☒ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation

Identify

Conservation Site

CONSITE_ID: 1007

SITENAME: DODD CREEK TRIBUTARY

BRANK: B4

LEGSTATUS: FL

ACRES: 514

SITE_BRIEF:

TYPE: Conservation Site

1 Features

0 1247ft

0 380m

Aerial Imagery Copyright 2002 - Virginia Geographic Information Network



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer
 ☐ Diabase Screening Layer

Karst Research

☐ Dye Inputs
 ☐ Monitor Points
 ☐ Dye Trace Vectors

Reference Layers

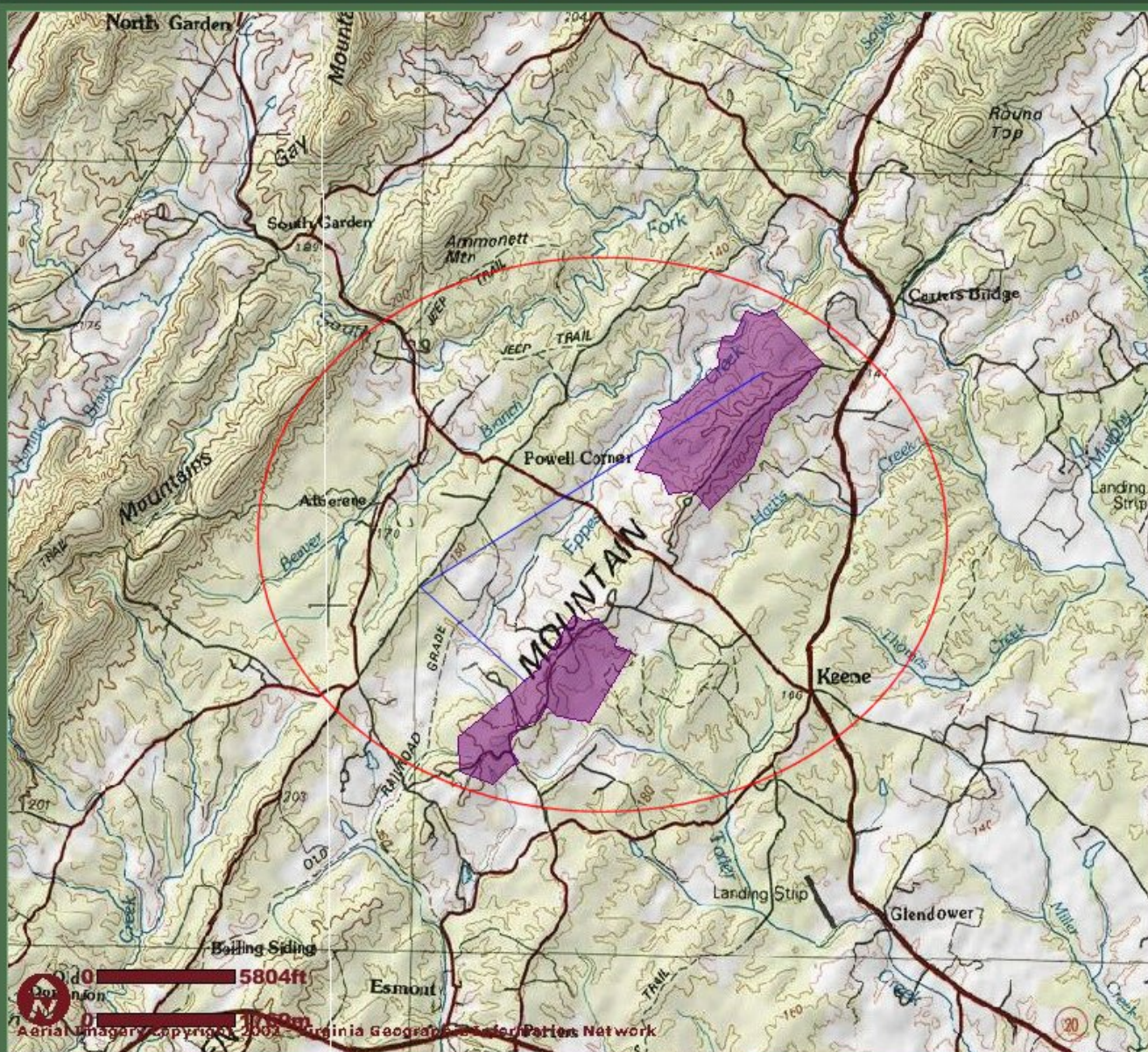
☐ DRG Quad Grid
 ☐ USGS Placenames
 ☐ Trails
 ☐ VDOT Roads
 ☐ NHD Streams
 ☐ Managed Conservation Lands
 ☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units
 ☐ 8-Digit USGS Watersheds
 ☐ Physiographic Provinces
 ☐ Planning Districts (PDC)
 ☒ Counties
 ☒ States

Base Layers

☐ VBMP Imagery
 ☒ 24k TOPO



Measure NH Screening Layer

1: 69645

Zoom To Latitude/Longitude

Lat (Easting):

Long (Northing):

GO

Length: 5864.20 ft (1.11 miles)

Internet



Layers

Legend

Labels

- ☐ Conservation Lands Labels

Natural Heritage Resources

- ☐ NH Screening Layer
- ☐ Diabase Screening Layer

Karst Research

- ☐ Dye Inputs
- ☐ Monitor Points
- ☐ Dye Trace Vectors

Reference Layers

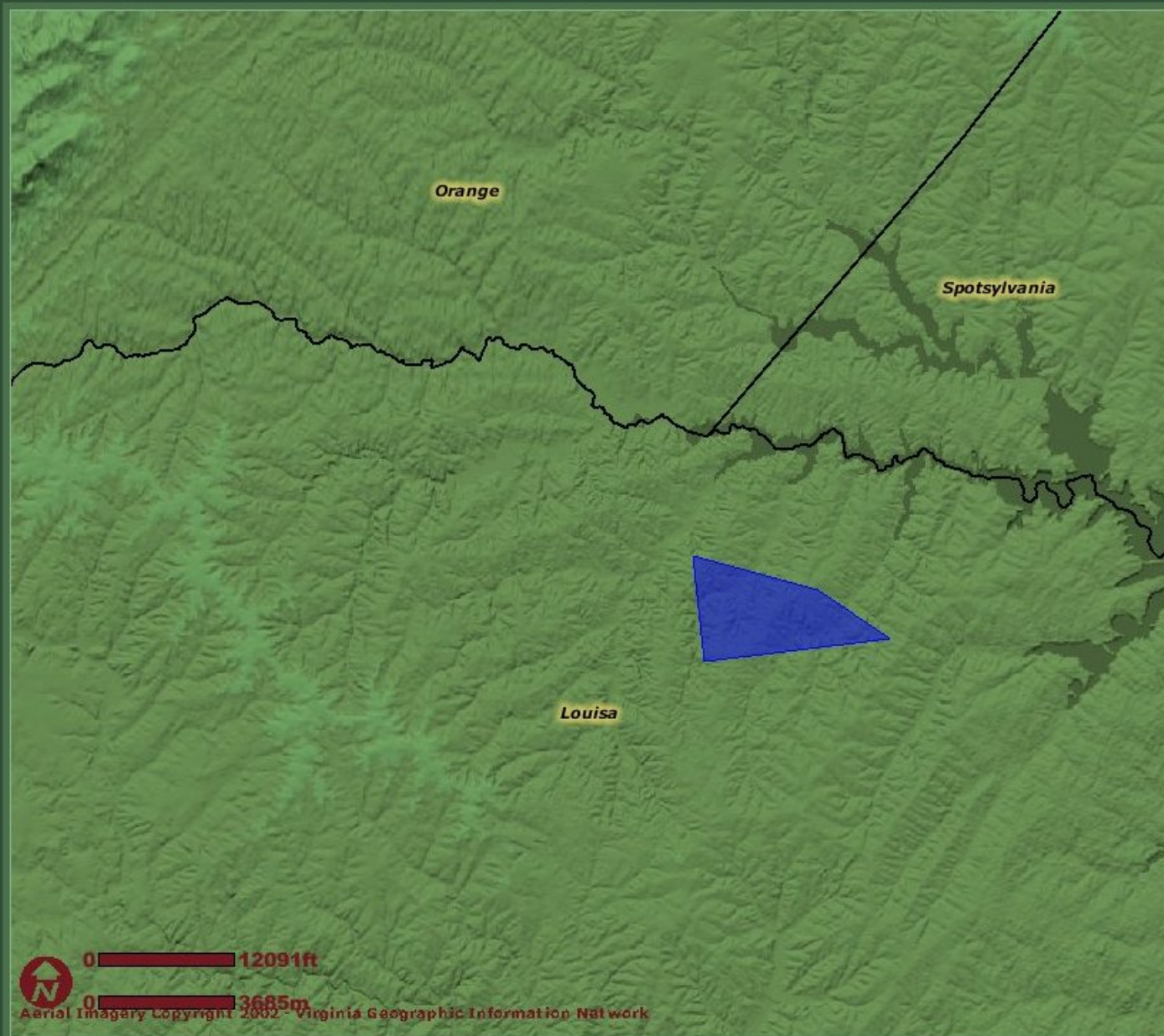
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- ☐ USGS Placenames
- ☐ Trails
- ☐ VDOT Roads
- ☐ NHD Streams
- ☐ Managed Conservation Lands
- ☐ NWI Wetlands

Boundaries

- ☐ Subhydrologic Units
- ☐ 8-Digit USGS Watersheds
- ☐ Physiographic Provinces
- ☐ Planning Districts (PDC)
- ☒ Counties
- ☒ States

Base Layers

- ☐ VBMP Imagery
- ☒ 24k TOPO


[Draw Polygon](#)
[NH Screening Layer](#)

1: 145087

[Zoom To](#)

Lat (Easting):

Long (Northing):

[GO](#)



Layers Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

☐ NHD Streams

☐ Managed Conservation Lands

☐ NWI Wetlands

Boundaries

☐ Subhydrologic Units

☐ 8-Digit USGS Watersheds

☐ Physiographic Provinces

☐ Planning Districts (PDC)

☒ Counties

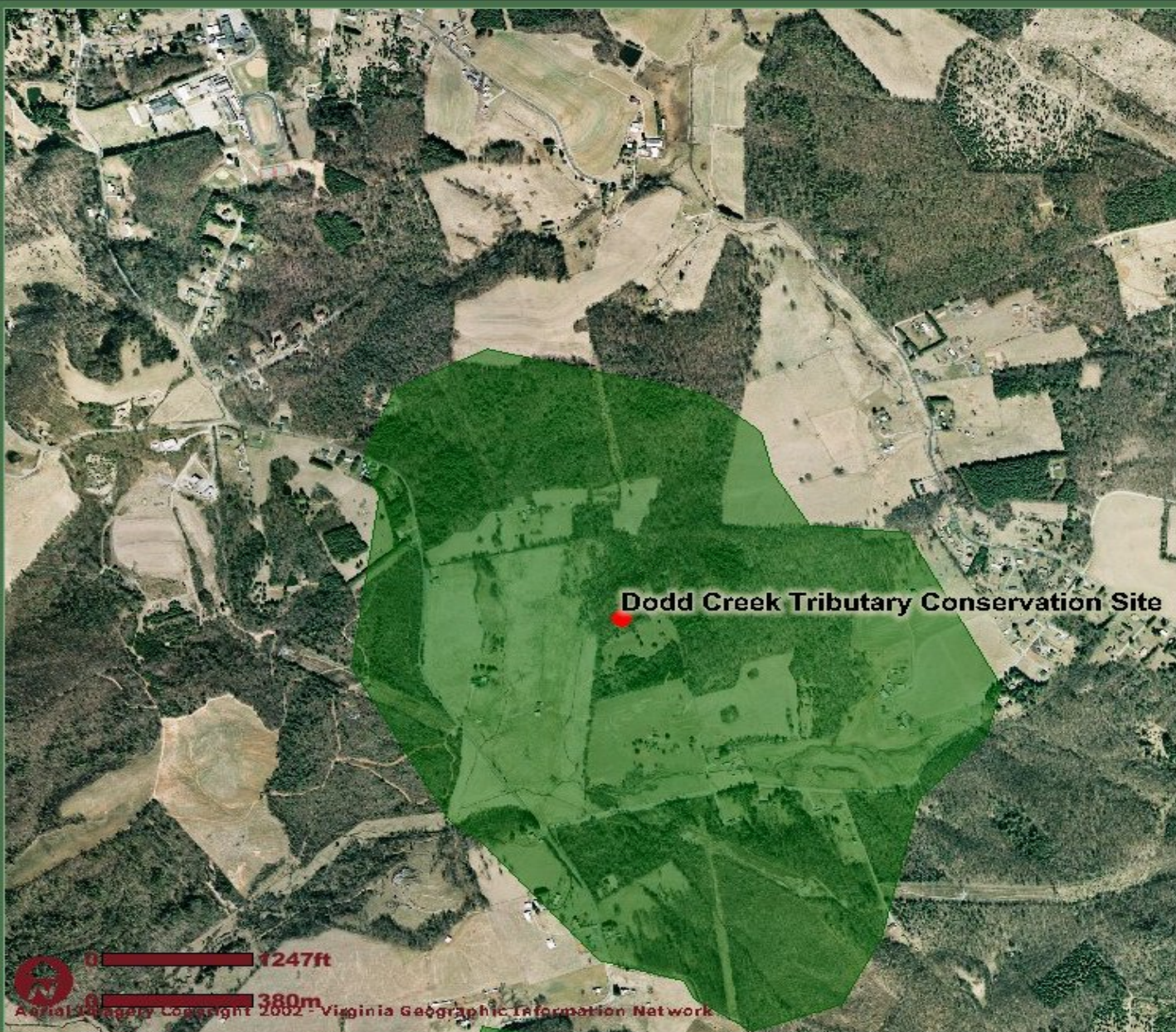
☒ States

Base Layers

☒ VBMP Imagery

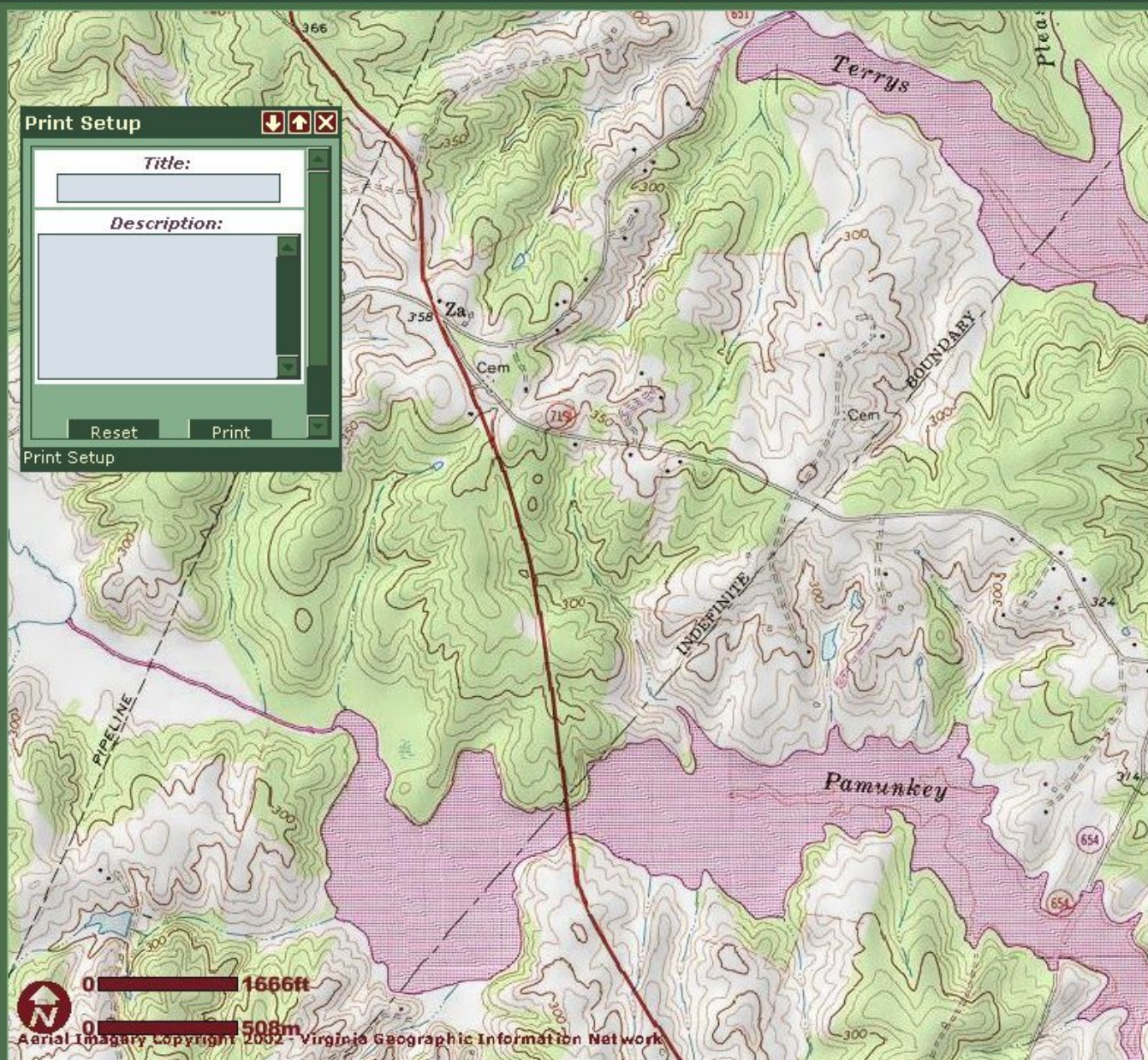
☒ 24k TOPO

☒ 100k TOPO

☒ Elevation




Layers	Legend
Labels	
Natural Heritage Resources	
<input checked="" type="checkbox"/> NH Screening Layer	
<input type="checkbox"/> Diabase Screening Layer	
Karst Research	
<input type="checkbox"/> Dye Inputs	
<input type="checkbox"/> Monitor Points	
<input type="checkbox"/> Dye Trace Vectors	
Reference Layers	
<input type="checkbox"/> DRG Quad Grid	
<input type="checkbox"/> USGS Placenames	
<input type="checkbox"/> Trails	
<input type="checkbox"/> VDOT Roads	
<input type="checkbox"/> NHD Streams	
<input type="checkbox"/> Managed Conservation Lands	
<input type="checkbox"/> NWI Wetlands	
Boundaries	
<input type="checkbox"/> Subhydrologic Units	
<input type="checkbox"/> 8-Digit USGS Watersheds	
<input type="checkbox"/> Physiographic Provinces	
<input type="checkbox"/> Planning Districts (PDC)	
<input checked="" type="checkbox"/> Counties	
<input checked="" type="checkbox"/> States	
Base Layers	
<input type="checkbox"/> VBMP Imagery	
<input checked="" type="checkbox"/> 24k TOPO	
<input checked="" type="checkbox"/> 100k TOPO	
<input checked="" type="checkbox"/> Elevation	





Layers

Legend

Labels

- ☐ Conservation Lands Labels

Natural Heritage Resources

- ☐ NH Screening Layer
- ☐ Diabase Screening Layer

Karst Research

- ☐ Dye Inputs
- ☐ Monitor Points
- ☐ Dye Trace Vectors

Reference Layers

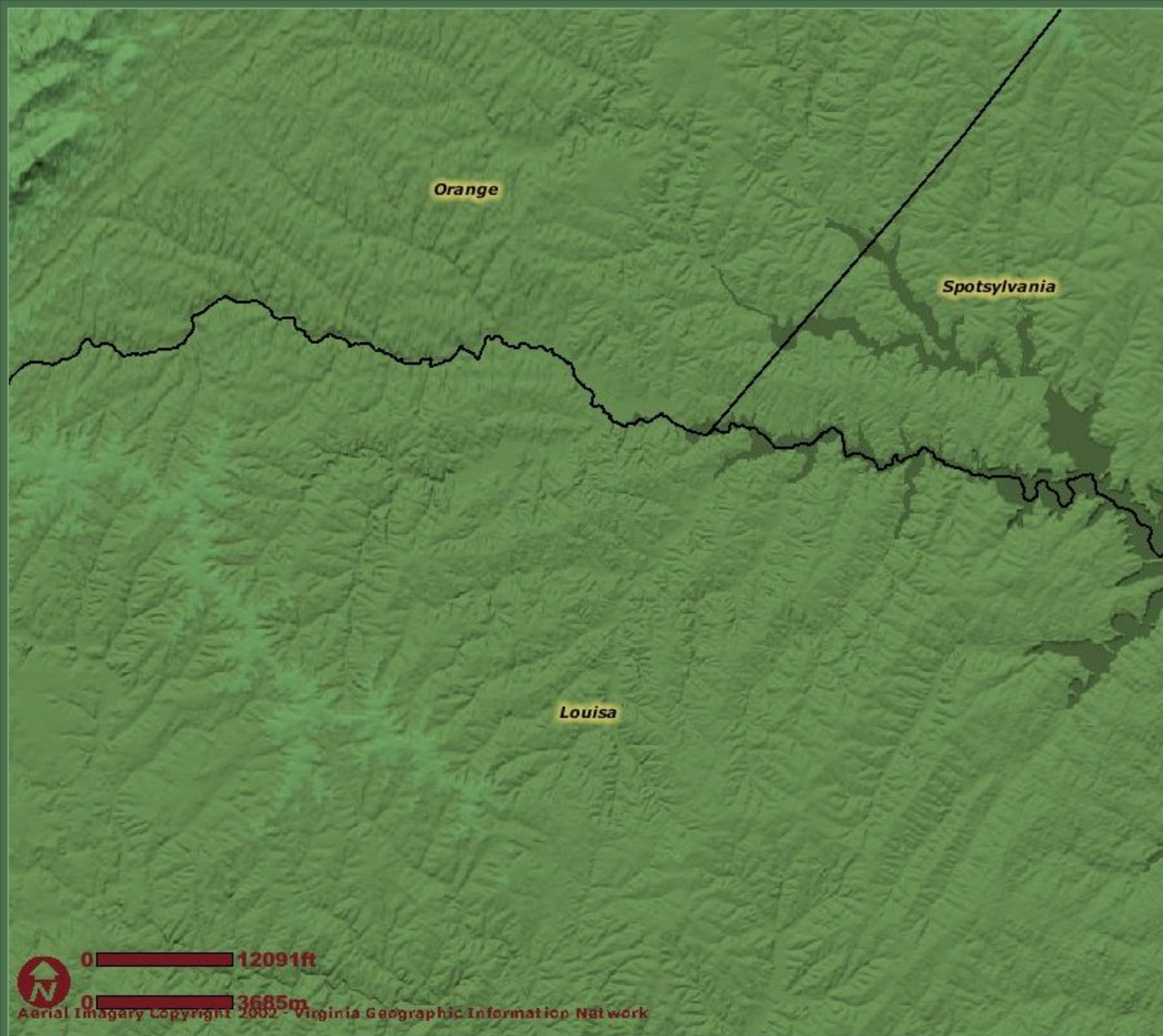
- ☐ DRG Quad Grid
- ☐ USGS Placenames
- ☐ Trails
- ☐ VDOT Roads
- ☐ NHD Streams
- ☐ Managed Conservation Lands
- ☐ NWI Wetlands

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- ☐ Subhydrologic Units
- ☐ 8-Digit USGS Watersheds
- ☐ Physiographic Provinces
- ☐ Planning Districts (PDC)
- ☒ Counties
- ☒ States

Base Layers

- ☐ VBMP Imagery
- ☒ 24k TOPO



[Main Help](#)

[Main Help](#)

Click on an area of the screen to learn more



- Draw Project for Review - Enter a project boundary and query for conflicts with Natural Heritage Resources.



Layers

Legend

Labels

☐ Conservation Lands Labels

Natural Heritage Resources

☒ NH Screening Layer

☐ Diabase Screening Layer

Reference Layers

☐ DRG Quad Grid

☐ USGS Placenames

☐ Trails

☐ VDOT Roads

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☐ Planning Districts (PDC)

☒ Counties

☒ States

Base Layers

☐ VBMP Imagery

☒ 24k TOPO

☒ 100k TOPO

☒ Elevation

Project Info

***Project Name:**

615-000-384

***Project Description:**

Paving Road

***Site Conditions:**

Existing Road

Latitude: 365440

Longitude: 801811

***Contact Name:**

DCR TIER 2 USER

***Company Name:**

DCR

Tax ID:

***Street Address:**

217 Governor Street

***City:** Richmond

***State:** VA

***Zipcode:** 23219

***Phone:** (804)786-8646

***Fax:** (804)371-2674

***Email:** nhwebreview@dcv.virginia.

Comments:

Project Info

0 1674ft

0 510m

Aerial Imagery Copyright 2002 - Virginia Geographic Information Network

**From:** reports@gis.timmons.com

04/19/06 8:54 AM

To: <nhwebreview@dcv.virginia.gov>; <nhwebreview@dcv.virginia.gov>**Subject:** 615-000-384 - nhwebreview@dcv.virginia.gov

Thank you for submitting your project to DCR Natural Heritage. Attached is an overview of the results and potential conflicts.



Message



DCR_NH_R...



Department of Conservation & Recreation

CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

PROJECT INFORMATION

TITLE: 615-000-384

DESCRIPTION: Paving Road

EXISTING SITE CONDITIONS: Existing Road

QUADRANGLES: FLOYD

COUNTIES: Floyd

Latitude/Longitude (DMS): 365440/801811

Acreage: 5

Comments:

REQUESTOR INFORMATION

Contact Name: DCR TIER 2 USER

Company Name: DCR

Address: 217 Governor Street

City: Richmond

State: VA

Zip: 23219

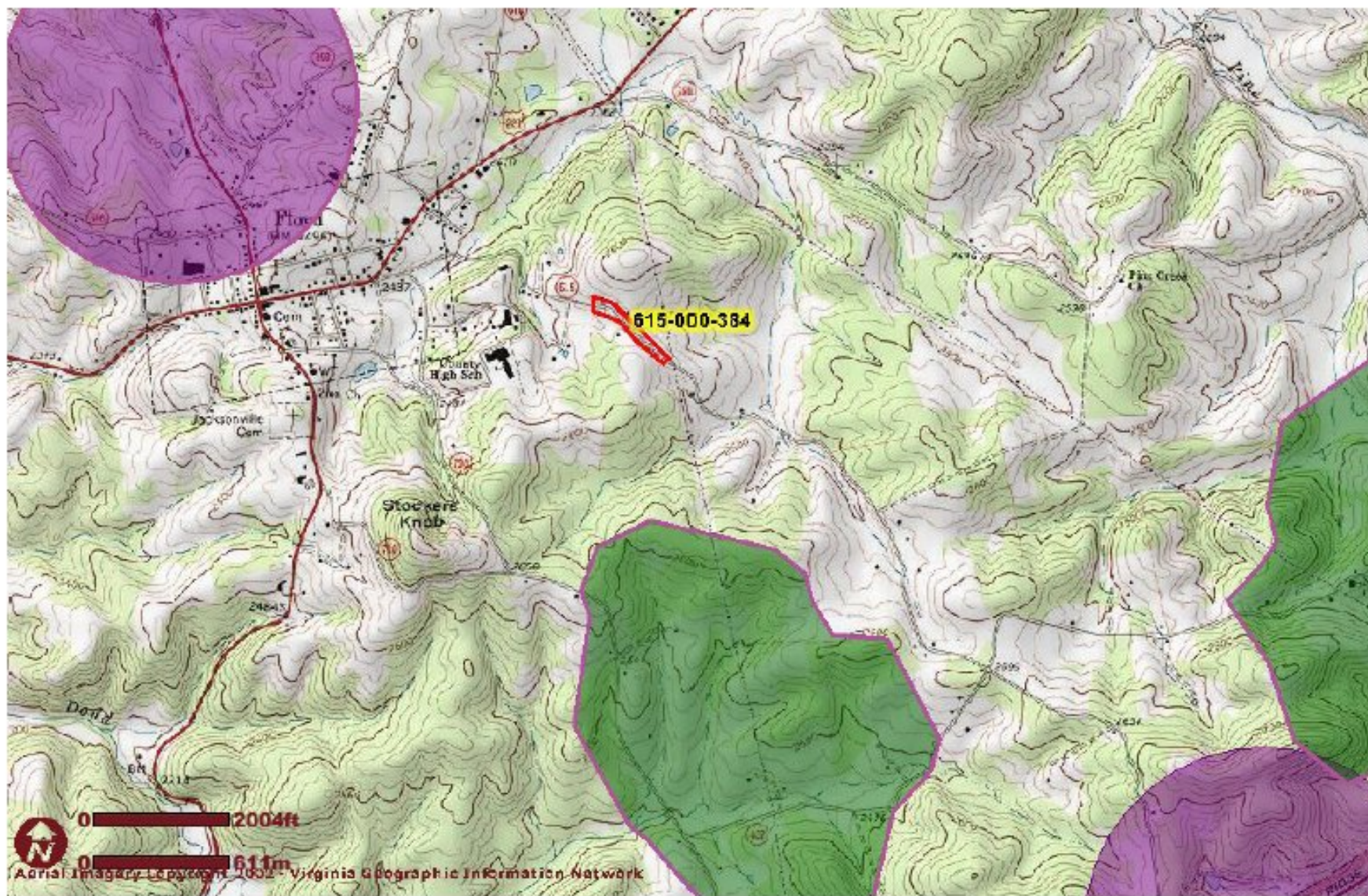
Phone: (804)786-8646

Fax: (804)371-2674

Email: nhwebreview@dcr.virginia.gov

Site-Name	Group-Name	common-name	scientific-name	GRANK	SRANK	Fed Status	st status	EO Rank	last obs date	precision
	Vascular Plant	Brown Bog Sedge	Carex buxbaumii	G5	S2			E	1985-05-26	M
	Vascular Plant	Brown Bog Sedge	Carex buxbaumii	G5	S2			E	1983-07-23	M
	Vascular Plant	Gray's Lily	Lilium grayi	G3	S2			E	1982-07-04	M
	Vascular Plant	Sword-leaved Phlox	Phlox buckleyi	G2	S2	SOC		H	1980-06-15	G
DODD CREEK TRIBUTARY	Vertebrate Animal	Bog Turtle	Glyptemys muhlenbergii	G3	S1S2	LT	LE	E	1987-05-26	S
NEW HAVEN	Vertebrate Animal	Bog Turtle	Glyptemys muhlenbergii	G3	S1S2	LT	LE	H	1972-05-23	S
OLDFIELD CREEK SEEP	Vascular Plant	Linear-leaved Willow-herb	Epilobium leptophyllum	G5	S2			BC	2001-07-02	S
Natural Heritage Resources within Search Radius										

Conservation Site Name	Site Type	Brank	Acreage	Listed Species Presence
	GLNHR			
	GLNHR			
NEW HAVEN	Conservation Site	B4	680	FL
ROBERTSON BOG	Conservation Site	B4	145	FL
DODD CREEK TRIBUTARY	Conservation Site	B4	514	FL
OLDFIELD CREEK SEEP	Conservation Site	B5	3	NL
Natural Heritage Conservation Sites within Search Radius				



Quads: FLOYD

Counties: Floyd

615-000-384

Company: DCR

Lat/Long: 365440/801811



COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

The project mapped as part of this report has been searched against the Department of Conservation and Recreation's Biotics Data System for occurrences of natural heritage resources from the area indicated for this project. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in Biotics files, **NATURAL HERITAGE RESOURCES HAVE BEEN DOCUMENTED** within two miles of the indicated project boundaries.

You have submitted this project to DCR for a more detailed review for potential impacts to natural heritage resources. DCR will review the submitted project to identify the specific natural heritage resources in the vicinity of the proposed project. Using the expertise of our biologists, DCR will evaluate whether your specific project is likely to impact these resources, and if so how. DCR's response will indicate whether any negative impacts are likely and, if so, make recommendations to avoid, minimize and/or mitigate these impacts. If the potential negative impacts are to species that are state- or federally-listed as threatened or endangered, DCR will also recommend coordination with the appropriate regulatory agencies: the Virginia Department of Game and Inland Fisheries for state-listed animals, the Virginia Department of Agriculture and Consumer Services for state-listed plants and insects, and the United States Fish and Wildlife Service for federally listed plants and animals. If your project is expected to have positive impacts we will report those to you with recommendations for enhancing these benefits.

Please allow up to 30 days for a response.

We will review the project based on the information you included in the Project Info submittal form, which is included in the report that follows. Often additional information can help us make a more accurate and detailed assessment of a project's potential impacts to natural heritage resources. If you have additional information that you believe will help us better assess your project's potential impacts, you may send that information to us. Please refer to the project Title (from the first page of this report) and include this pdf file with any additional information you send us.

Thank you for submitting your project for review to the Virginia Natural Heritage Program through the NH Data Explorer. Should you have any questions or concerns about DCR, the Data Explorer, or this report, please contact the Natural Heritage Project Review Unit at 804-371-2708.

its.



VA NH Data Explorer Hands-on Training

- Upcoming training dates:
 - Sept 17th in Salem
 - Oct 17th at VIMS
- Contact Katy Alldredge to register
804-786-7951 or
Katy.Alldredge@dcr.virginia.gov

Virginia Conservation Lands Needs Assessment



Green Infrastructure Planning

- Green Infrastructure is our natural life support system:
 - an interconnected network of protected land and water that sustains air and water resources, maintains natural ecological processes, supports native species, and contributes to the health and quality of life for the people in our communities.
 - “...it looks at conservation values and actions in concert with land development and growth management”



Healthy ecosystems provide free “services” to human communities, including: water filtration, groundwater recharging, stormwater control, air purification, nutrient recycling, crop pollination, and soil enrichment.



VA Conservation Lands Needs Assessment (VCLNA)

- An integrated assemblage of datasets and prioritization guidelines that can be used to identify Green Infrastructure according to the needs and strategies of different conservation interests
 - Widely applicable tool for identifying and prioritizing land conservation
- Data is available in three formats:
 - GIS format for in house manipulation and use
 - Web based application to provide local users with GIS tools and information at the desktop via the Web (August 2007)
 - Hard copy maps and atlas format



VA Natural Landscape Assessment (VANLA)

- One component of the more comprehensive VCLNA
- A landscape-scale GIS analysis for identifying, prioritizing and linking natural habitats in Virginia
 - ‘Habitat fragmentation’
- Generates ecological data layers that complement other conservation interests and needs

Central Stafford County - 1981



National High Altitude Photography

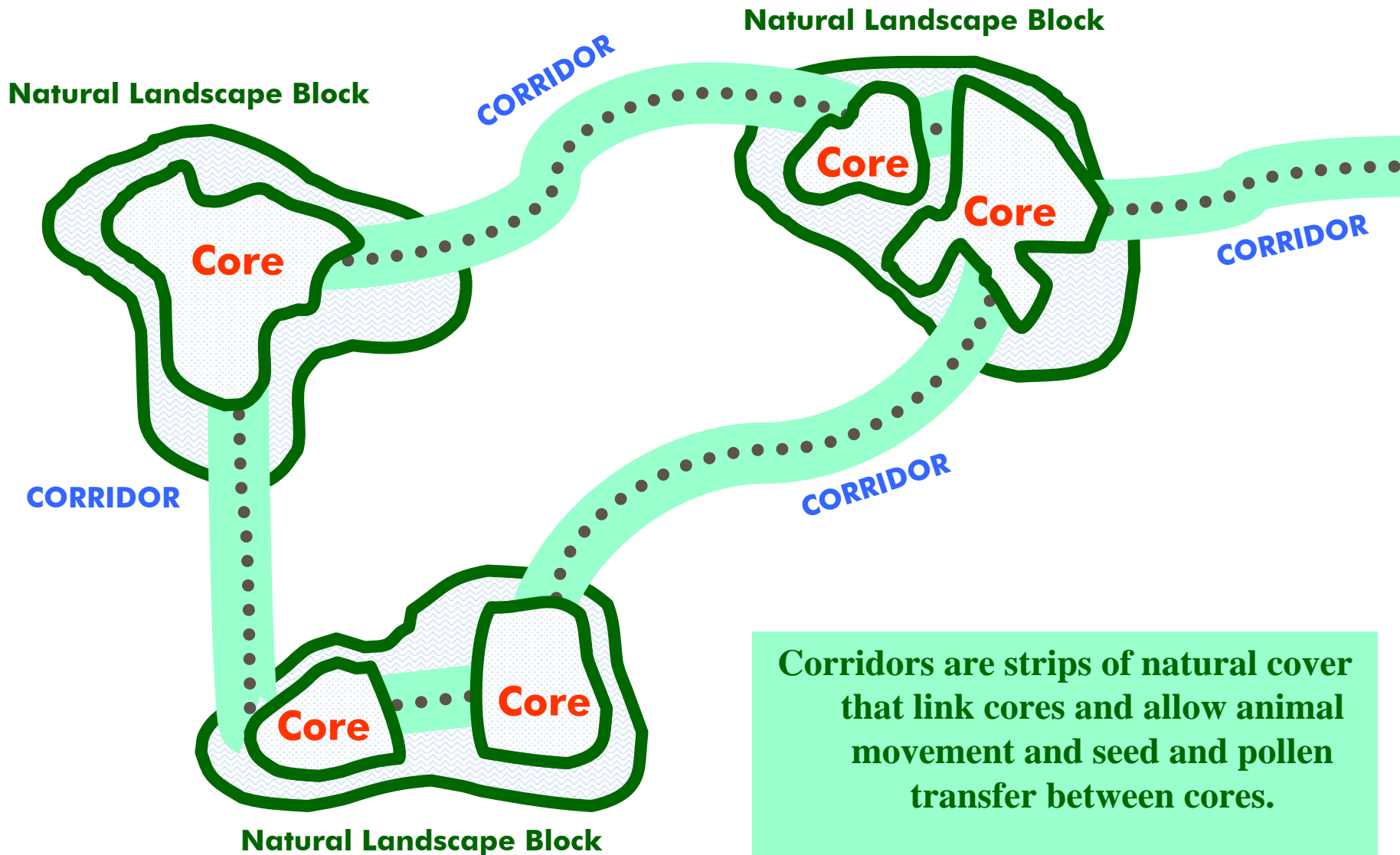
Central Stafford County - 2002

“Between 1992 and 1997, Virginia lost 343,500 acres to development.”

“If current trends continue, Virginia will develop more land in the next 40 years than it has in the past 400 years.”

**Source: The Virginia Conservation Network
 Smart Growth (white paper)
 http://www.vcnva.org/white_papers/2003/smart_growth.php**

Conceptual Model of the VA Natural Landscape Assessment

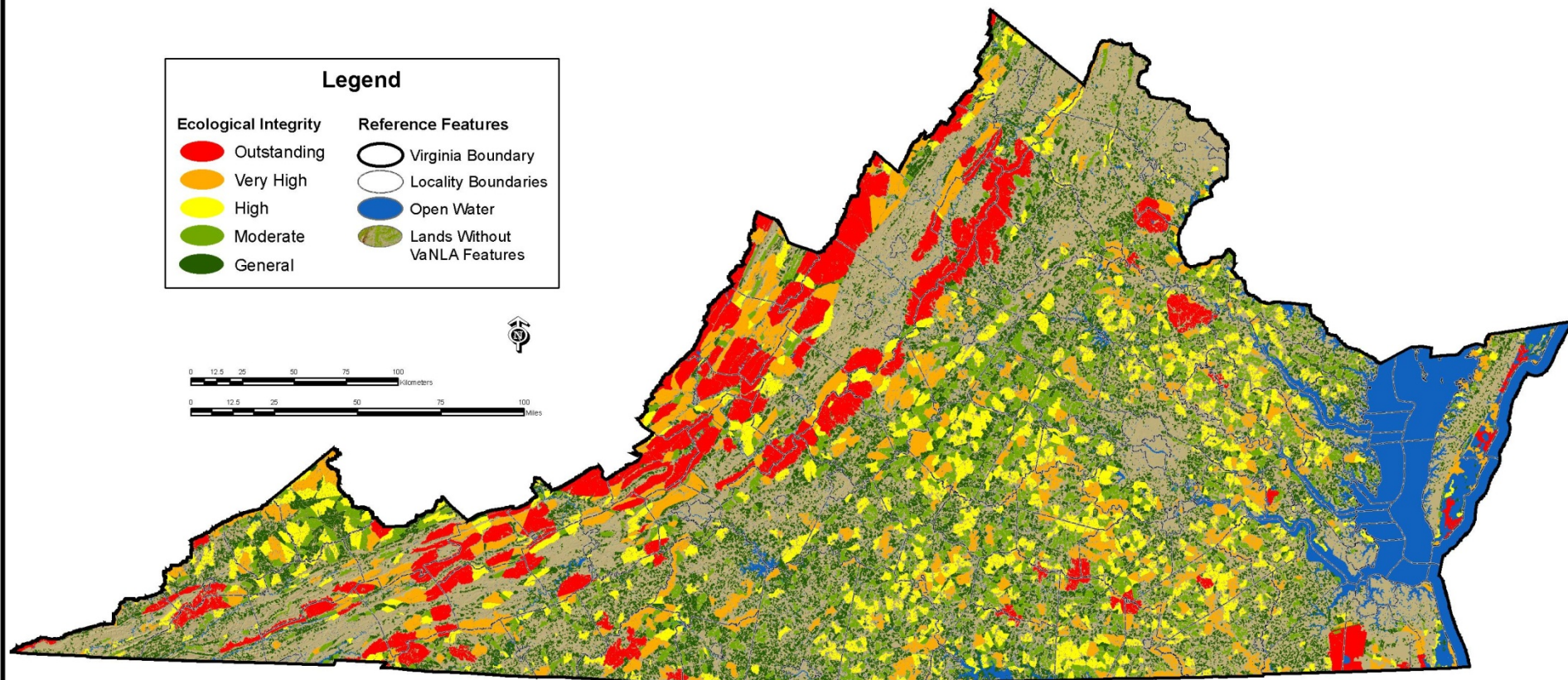
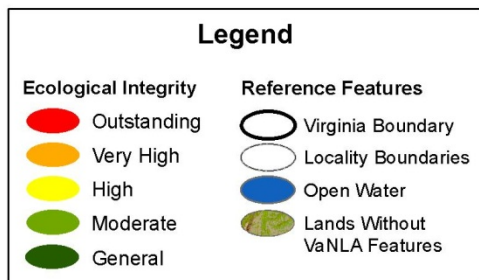


Virginia Conservation Lands Needs Assessment

Virginia Natural Landscape Assessment

Cores and Habitat Fragments Prioritized by Ecological Integrity

June 2007



Definitions

Core: A patch of natural land with at least 100 acres of interior cover. Interior cover begins 100 meters inward from the patch edge.

Habitat Fragment: A patch of natural land with 10 to 99 acres of interior cover. Interior cover begins 100 meters inward from the patch edge.

Ecological Integrity: Maintaining vital natural landscapes is essential for basic ecosystem services such as cleaning our air and filtering our water. Natural lands also harbor thousands of species of animals and plants and contain libraries of genetic information from which we derive new foods, materials, and medicinal compounds. These parts of the landscape also provide us with recreational opportunities and open space resources. But these qualities are represented differently across the cores and habitat fragments that constitute the natural landscape. To assess their unique values, we are assigning each core and habitat fragment an ECOLOGICAL INTEGRITY score that rates the relative contribution of that area to the values above. In general, larger, more biologically diverse areas are given higher scores. Scores are enhanced if the core or habitat fragment is part of a larger complex of natural lands. Areas that may contribute to water quality enhancement score higher, as well, while other factors have yet to be analyzed in this work in progress.

For more information about the VaNLA and other components of the VCLNA, visit DCR's website at <http://www.dcr.virginia.gov/>.





New for the VCLNA...

- Extending the VA Natural Landscape Assessment to the entire state with:
 - New land cover data
 - Revised and improved methodology
- Identifying and developing issue-specific data sets, with assistance from other agencies and organizations, to integrate with the Natural Landscape Assessment, e.g.
 - Natural heritage resources
 - Outdoor recreation
 - Water quality improvement
 - Drinking water protection
 - Cultural and historic resources
 - Sustainable forestry
 - Prime farmland
 - Vulnerability

Recreation Model

Objective: To map the relative recreation value of lands in Virginia based on input model parameters.

Partners:

VA Dept of Game and Inland Fisheries
DCR Division of Planning and Recreation
Resources

Data Layers:

- Access points
- Trails
 - ❖ Blueways
 - ❖ Greenways
 - ❖ Birding Trails
- Parks
 - ❖ Federal
 - ❖ State
 - ❖ Local
- Department of Game and Inland Fisheries
Hunting and Fishing Data
- Beaches - VIMS



- Analyses
 - ❖ Service Radii
 - ❖ Travel Time

Status: Completion April 2007;
data, metadata and technical
report available upon request.

DEPARTMENT OF CONSERVATION AND RECREATION
Virginia Conservation Lands Needs Assessment
Virginia Recreation Model

May 2007

Legend

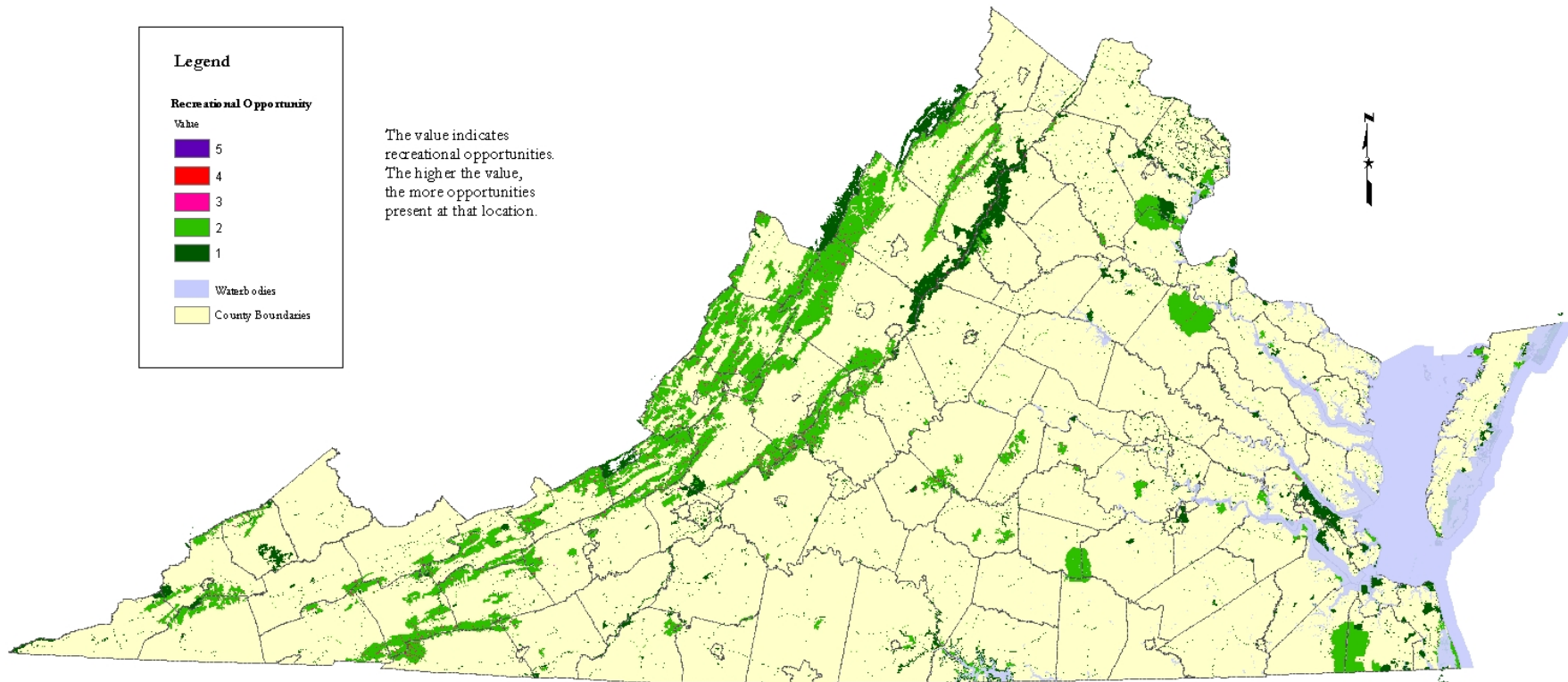
Recreational Opportunity

Value



Water bodies
County boundaries

The value indicates recreational opportunities. The higher the value, the more opportunities present at that location.



0 12.5 25 50 75 100 Miles



For more information about the VCLNA and the Recreation Model, visit DCR's website:
http://www.dcr.virginia.gov/natural_heritage/vclna.shtml

Water Quality Model

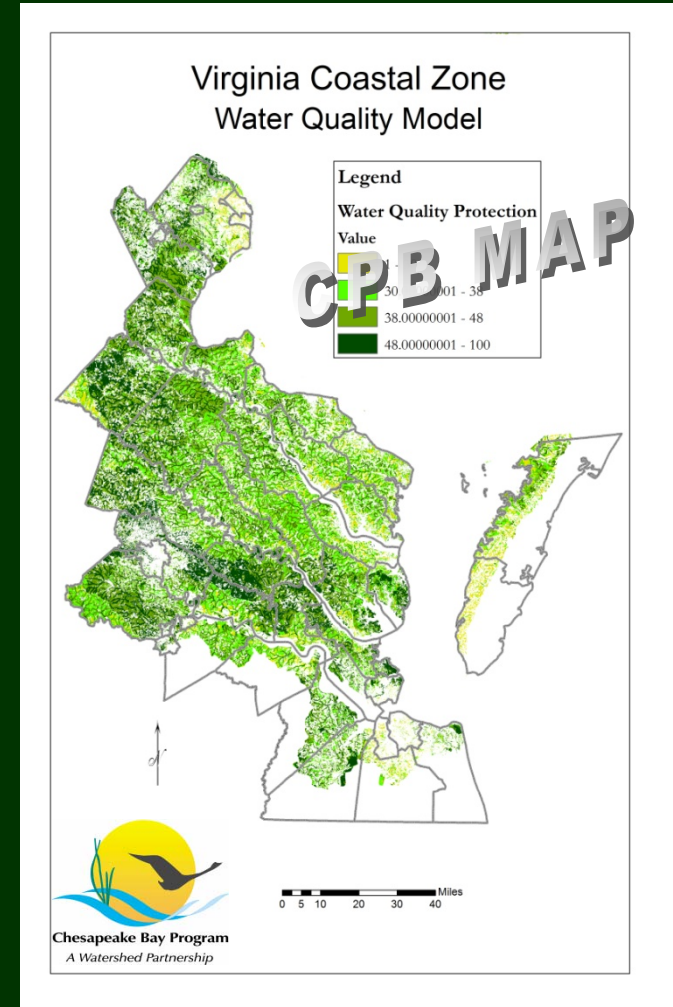
Objective: To identify the relative value of lands as they contribute to water quality and watershed integrity.

Potential Partners:

- VA Dept of Environmental Quality
- DCR – Division of Soil and Water
- VA Dept of Forestry
- Virginia Commonwealth University

Potential Data Layers:

- INSTAR – VCU Center for Environmental Studies
- Proximity to Water
- Erodible Soils
- Slope
- Forest Fragmentation
- SPARROW or NPS data from Division of Soil and Water
- Stream Density (m/sq km)
- Impervious Surfaces
- Municipal Water Supplies – VA Dept Health



Status: In production, completion anticipated August 2007.

Cultural Assets

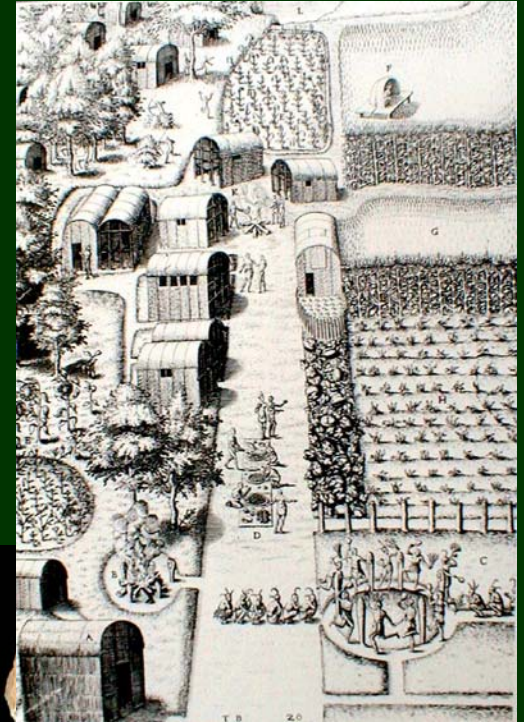
Objective: The objective of the cultural assets model is to identify the relative cultural value of lands as defined by the model input parameters.

Partner: Virginia Department of Historic Resources

Data Layers

- Archaeological Sites & Architectural Sites
 1. National Historic Districts
 2. National Historic Landmarks
 3. National Historic Register Sites
 4. State Inventoried Sites (Eligible for possible National Register and Easements)
- American Indian Areas

Status: Completed March 2006; data, metadata and technical report available upon request.



DEPARTMENT OF CONSERVATION AND RECREATION

Virginia Conservation Lands Needs Assessment

Virginia Cultural Asset Model

March 2006

Legend

Cultural Asset Value

1 - 5

5 - 9

9 - 12

13 - 16

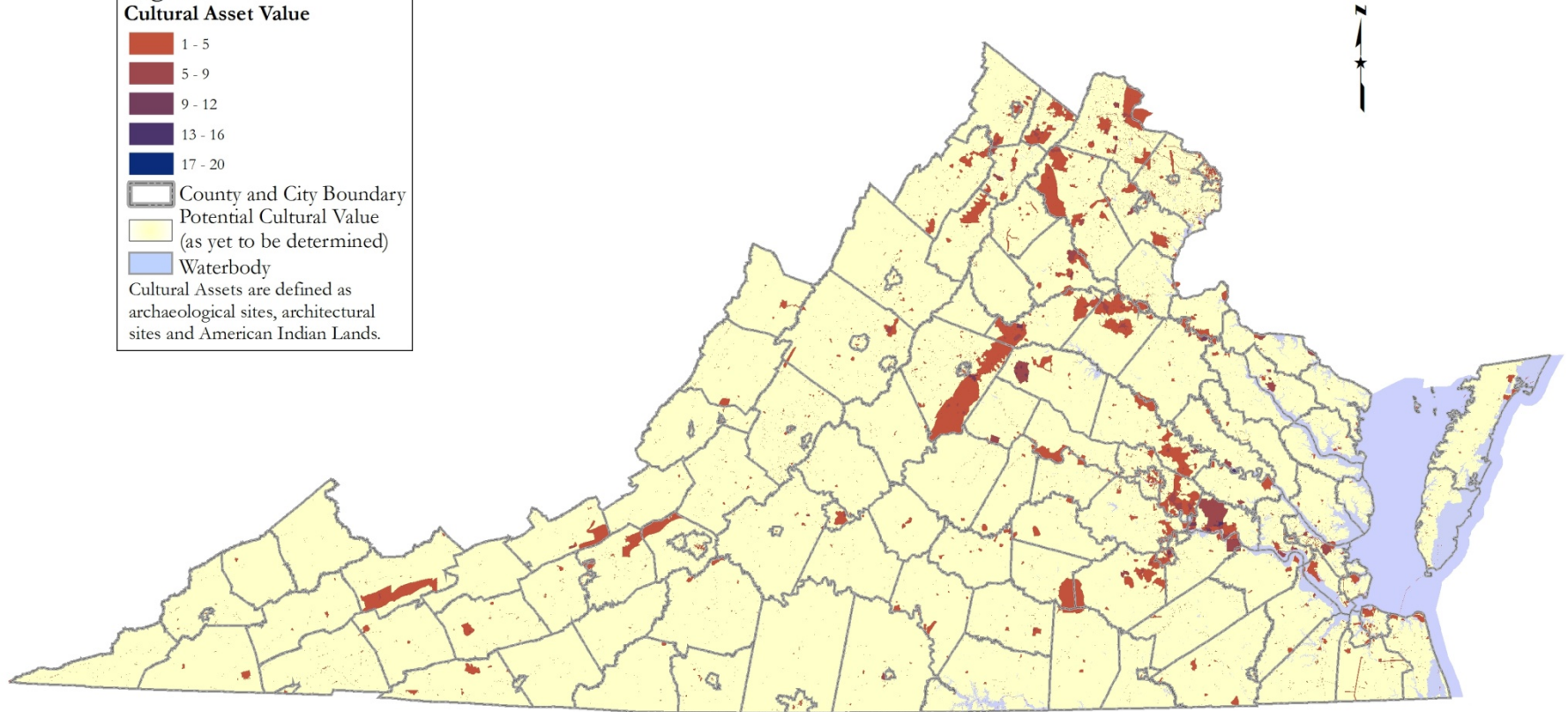
17 - 20

County and City Boundary

Potential Cultural Value
(as yet to be determined)

Waterbody

Cultural Assets are defined as
archaeological sites, architectural
sites and American Indian Lands.



0 12.5 25 50 75 100 Miles

For more information about the
VCLNA and the Cultural Assets
Model, visit DCR's website:
<http://www.dcr.state.va.us/dnh>

Forest Economics

Objective: To map the relative value of forest lands with economic value.

Partner: VA Dept of Forestry

Data Layers

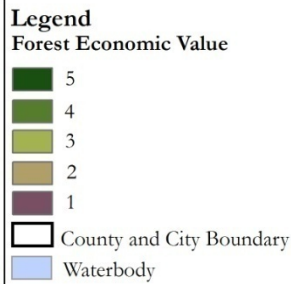
- Soil Productivity
- Forest Land Fragmentation
- Riparian and Wetland features
- Steep Slopes - NHD
- Rare, T and E Species
- Census Data – Geography Network / US Gov't
- Forest Land Use Taxation Values (economic data)
 - Stumpage value
 - Forest productivity values

Status: Completion May 2007; data, metadata and technical report available upon request.



DEPARTMENT OF CONSERVATION AND RECREATION
Virginia Conservation Lands Needs Assessment
Virginia Forest Economic Model

April 2007



The Forest Economic Model represents the value of forests in Virginia based on biophysical characteristics, timber management constraints and economic value. Values range from a high of 5 to a low of 1. A value of 5 indicates a high forest economic value. A value of 1 indicates a low forest economic value. Areas not represented in the model (non-forested areas) are in white.



Agricultural / Prime Farmland Model

Objective: To identify the relative agricultural productivity and sustainability value of lands in Virginia.

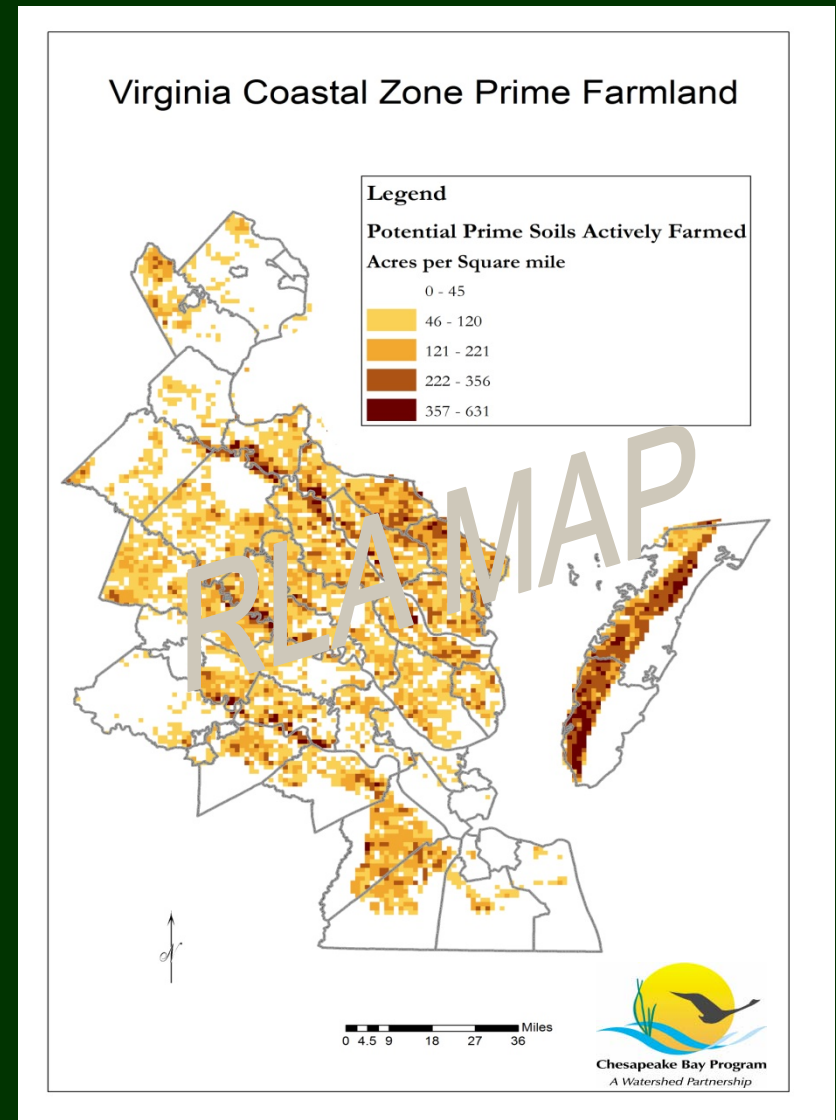
Potential Partners:

- o VA Dept of Agriculture
- o American Farmland Trust
- o VA Tech

Potential Data Layers:

- Soils data
- RESAC 2000 Land Cover
- National Elevation Dataset (Slope)
- DGIF Wildlife Action Plan Derivatives
- Additional information in production

Status: In production, anticipated completion August 2007.



Vulnerability Model

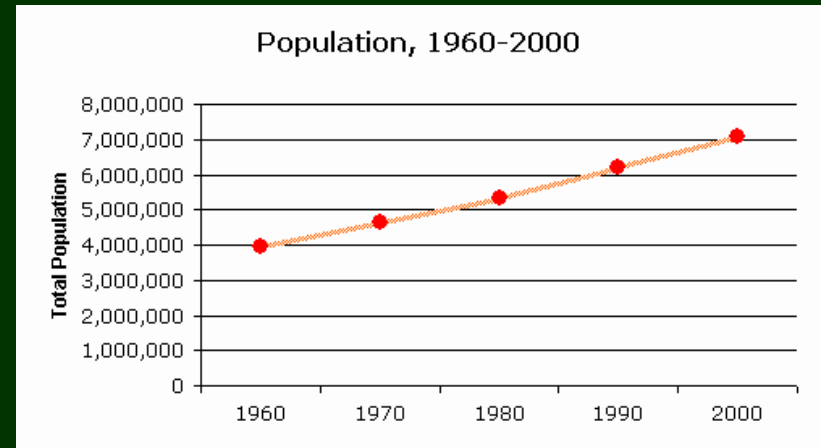
Objective: To develop a growth prediction model to provide a landscape view of growth trends in Virginia. Developed an Urban Growth Prediction Model, a Suburban Growth Prediction Model (called Urban Fringe Growth), a Rural Growth Prediction Model (called Growth Outside the Urban Fringe), and a composite model.

Partner: Virginia Commonwealth University

Data Layers:

- Land Use
- Slope
- 1990 Census Block Group data
- 2000 Census Block Group data
- 1990 Impervious Surface data
- 2000 Impervious Surface data
- Road Density
- Parcel data
- Rural-Urban Commuting Area Codes (RUCA)

Status: Completed July 2006, all 4 models available upon request including data, metadata and technical report.

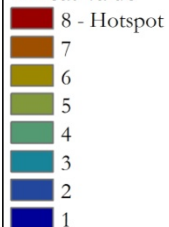


DEPARTMENT OF CONSERVATION AND RECREATION
Virginia Conservation Lands Needs Assessment
Virginia Vulnerability Model

July 2006

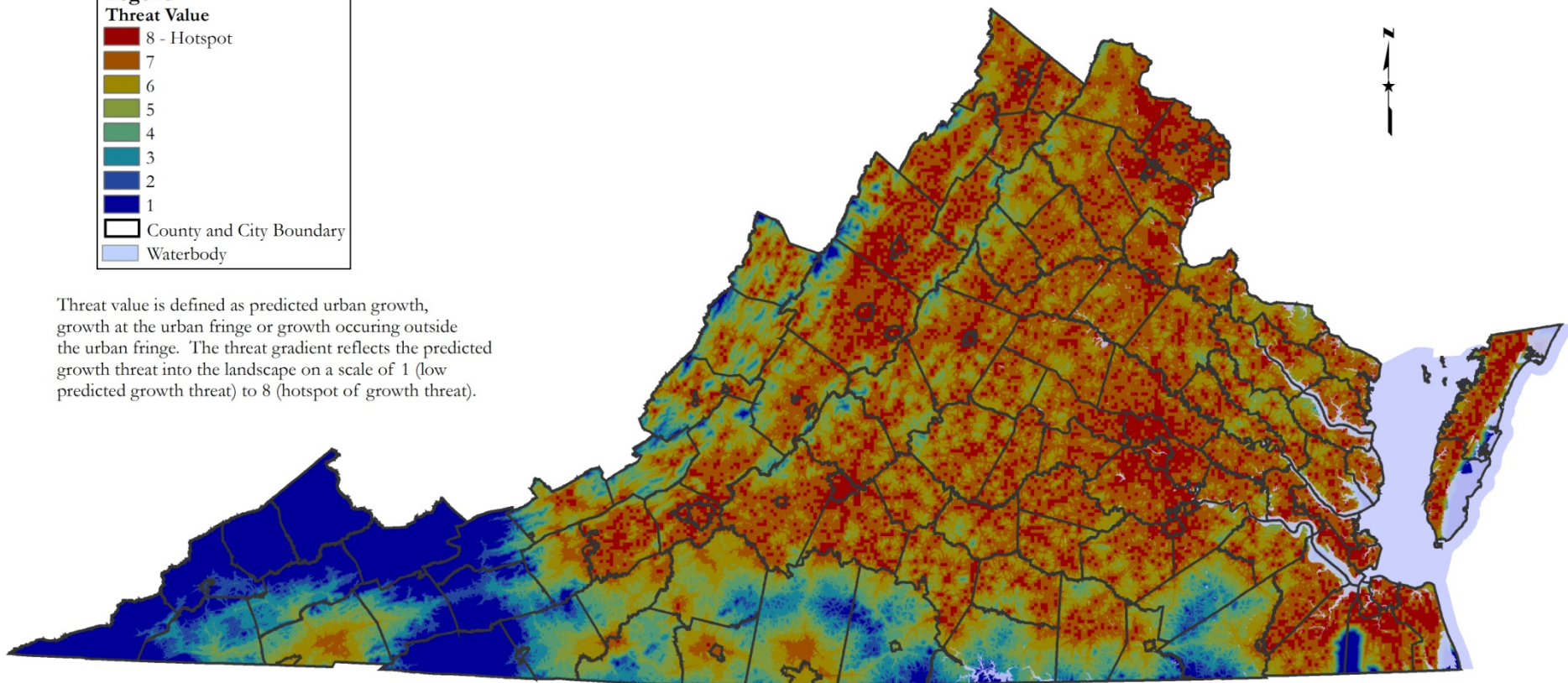
Legend

Threat Value



County and City Boundary
Waterbody

Threat value is defined as predicted urban growth, growth at the urban fringe or growth occurring outside the urban fringe. The threat gradient reflects the predicted growth threat into the landscape on a scale of 1 (low predicted growth threat) to 8 (hotspot of growth threat).



0 10 20 40 60 80 Miles

For more information about the VCLNA and the Vulnerability Model, visit DCR's website:
<http://www.dcr.virginia.gov/dnh/>



Conservation Lands Database

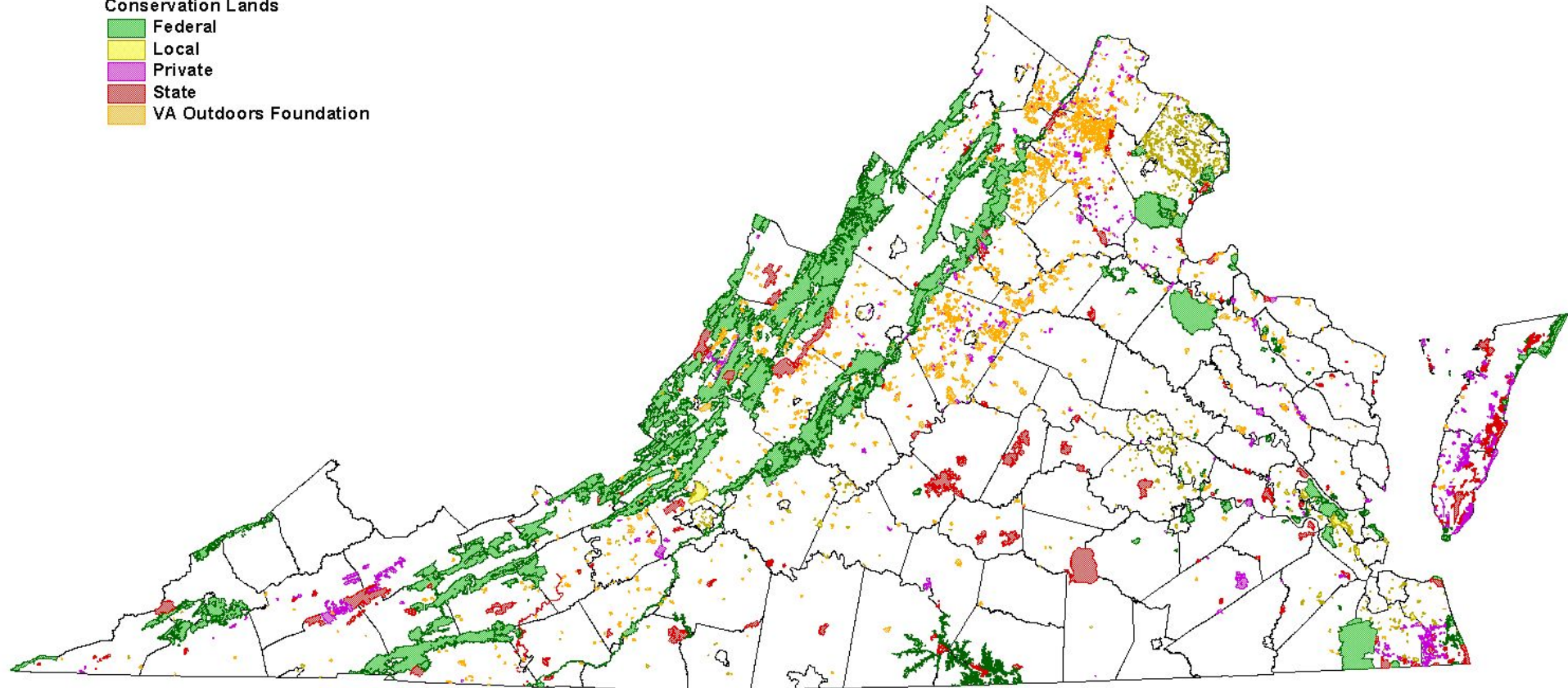
DCR has developed the Commonwealth's first comprehensive, continually maintained GIS data layer for Virginia's protected conservation lands.

- Database includes mapped boundaries and attributes for public and certain private lands in VA that have potential significance for serving a variety of conservation, recreation, and open-space roles.
- Included are:
 - Most federal and state lands,
 - Regional and interstate lands such as water and park authorities,
 - Parks and undeveloped or partially-developed lands owned by localities,
 - Lands owned as preserves by non-profit conservation organizations such as The Nature Conservancy, and
 - Conservation easements held by the Virginia Outdoors Foundation, land trusts and others.

Conservation Lands in Virginia

Conservation Lands

- Federal
- Local
- Private
- State
- VA Outdoors Foundation





Land Conservation Data Explorer

- Online GIS mapping application that can be used to display, search, query, and print maps and lists of Virginia's conservation lands and VCLNA data.
- <http://www.vaconservedlands.org>

[Info](#) [Layers](#) [Legend](#) [Find](#)

UPDATE MAP

Reference Layers

- ☐ DRG Quad Grid
- ☐ USGS Placenames
- ☐ VDOT Roads
- ☐ Trails
- ☐ Scenic Rivers
- ☐ NHD Streams
- ☐ NWI Wetlands
- ☒ Managed Conservation Lands

Boundaries

- ☐ Subwatershed Boundaries
- ☐ 8 Digit Watershed Boundaries
- ☒ Counties
- ☐ Physiographic Provinces
- ☐ Planning Districts (PDC)

VCLNA

- ☐ Landscape Corridors
- ☐ Ecological Cores
- ☐ Agricultural Model
- ☐ Cultural Asset Model
- ☐ Forest Economics Model
- ☐ Recreation Model
- ☐ Water Quality Integrity Model
- ☐ Vulnerability Model All Threats

Base Layers

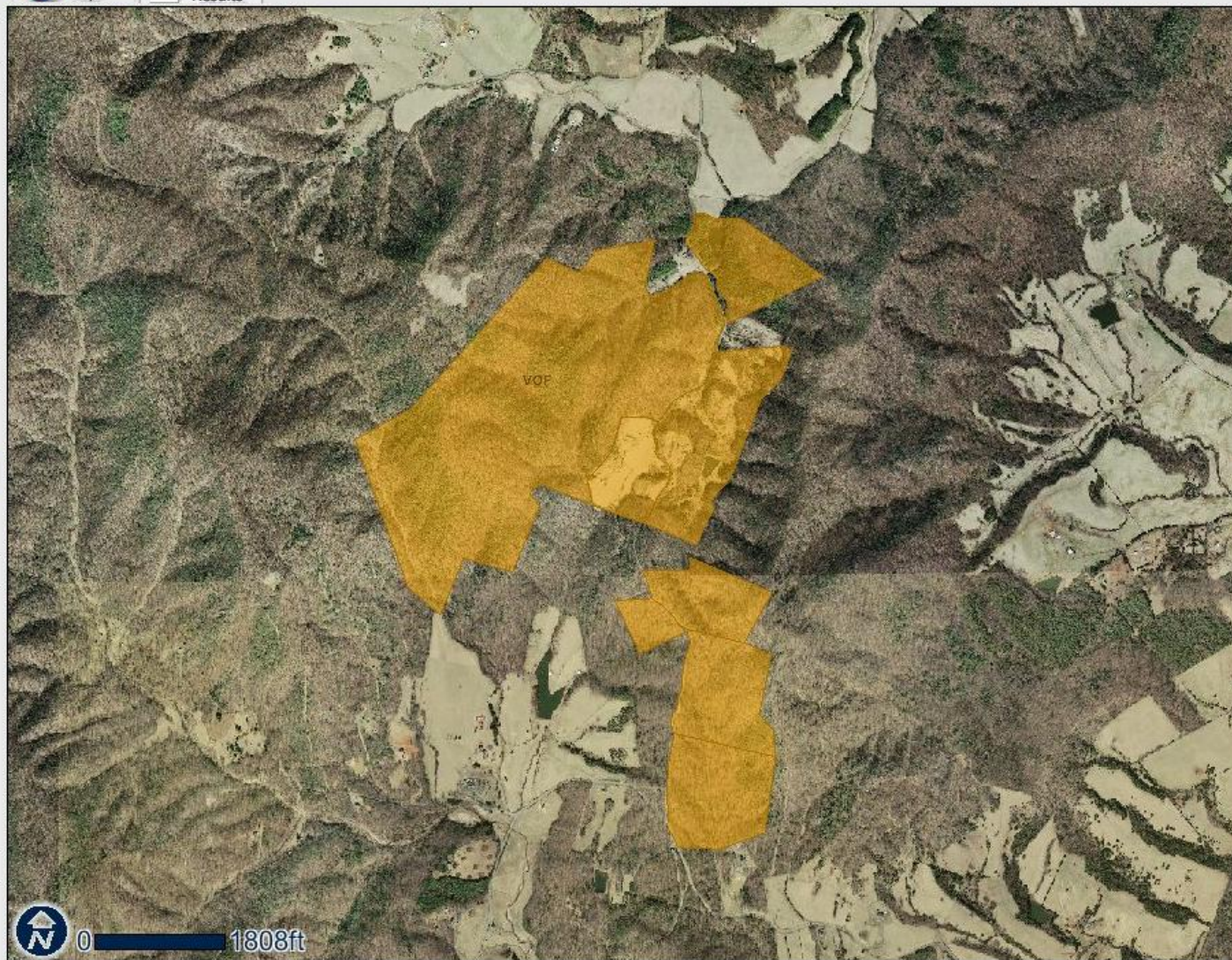
- ☒ VBMP Imagery
- ☐ Elevation



Map



Results



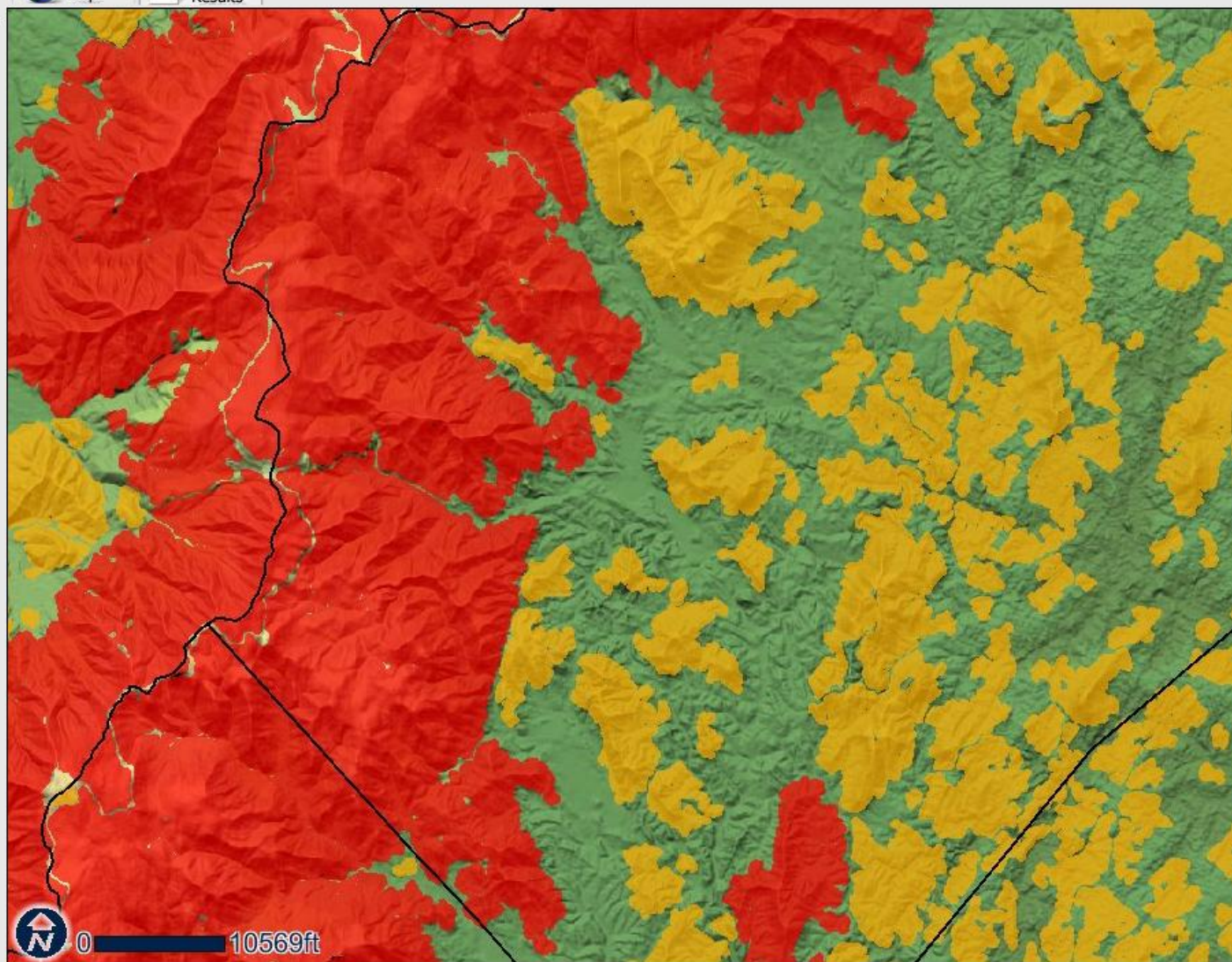


Map



Results

- ☐ Counties
- Ecological Cores
- C1 - Outstanding
 - C2 - Very High
 - C3 - High
 - C4 - Moderate
 - C5 - General
- Elevation



[Info](#)
[Layers](#)
[Legend](#)
[Find](#)

[Conservation Lands](#)
[VCLNA Queries](#)
[Other Queries](#)

Conservation Lands

Find Conservation Lands By:

County:

ACCOMACK
ALBEMARLE
 ALEXANDRIA
 ALLEGHANY
 AMELIA
 AMHERST
 APPOMATTOX
 ARLINGTON
 AUGUSTA

Name:

Type:

State Natural Area Preserve
 State Owned Tidal Lands
 State Park
 State Scenic Holding
 State Wildlife Management Area
 TNC Land Holding
 TNC Preserve
 University Property
 USFS Holding
VOF Easement

Acreage: to acres



Map



Results

Selection Results	
255 Features Found Total Acres: 53325.78	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
Managed Conservation Lands: VOF	
NOTE: Acreage values are not split by county or watershed boundaries. Any watershed or county-based query reflects the total acreage values for all intersecting lands and some acreage totals may appear inflated. Acreage does not include water bodies. Data scale differences may cause some discrepancies between tabular and map results; for examples, county boundaries are created at a smaller scale than parcel boundaries. Parcels along rivers may therefore intersect with multiple counties though really only occurring in one.	

[Next](#)

VOF Easements in Albemarle County

Total acres: 53325.78

Data Report

MANAME	MATYPE	MAAGENCY	MALEVEL	PUBACCESS	TOTALACRE
ALB-VOF-185	VOF Easement	VOF	VOF	closed	165
ALB-VOF-628	VOF Easement	VOF	VOF	closed	29.51
ALB-VOF-625	VOF Easement	VOF	VOF	closed	127.45
ALB-VOF-624	VOF Easement	VOF	VOF	closed	118
ALB-VOF-623	VOF Easement	VOF	VOF	closed	100
ALB-VOF-729	VOF Easement	VOF	VOF	closed	25.65
ALB-VOF-822	VOF Easement	VOF	VOF	closed	327
ALB-VOF-1038	VOF Easement	VOF	VOF	closed	228.14
ALB-VOF-1166	VOF Easement	VOF	VOF	closed	42.86
ALB-VOF-988	VOF Easement	VOF	VOF	closed	112.23
ALB-VOF-1640	VOF Easement	VOF	VOF	closed	64.1
ALB-VOF-1865	VOF Easement	VOF	VOF	closed	205.74
ALB-VOF-1866	VOF Easement	VOF	VOF	closed	172.16
ALB-VOF-184	VOF Easement	VOF	VOF	closed	506.4
ALB-VOF-330	VOF Easement	VOF	VOF	closed	43.9
ALB-VOF-397	VOF Easement	VOF	VOF	closed	23
ALB-VOF-814	VOF Easement	VOF	VOF	closed	38
ALB-VOF-1183	VOF Easement	VOF	VOF	closed	416.48
ALB-VOF-1185	VOF Easement	VOF	VOF	closed	124.46
ALB-VOF-1953	VOF Easement	VOF	VOF	closed	648.29
ALB-VOF-1980	VOF Easement	VOF	VOF	closed	37.47
ALB-VOF-1977	VOF Easement	VOF	VOF	closed	150
ALB-VOF-1901	VOF Easement	VOF	VOF	closed	196.9
ALB-VOF-1905	VOF Easement	VOF	VOF	closed	506.97
ALB-VOF-1852	VOF Easement	VOF	VOF	closed	457.66
ALB-VOF-1904	VOF Easement	VOF	VOF	closed	173
ALB-VOF-1903	VOF Easement	VOF	VOF	closed	441.79
ALB-VOF-861	VOF Easement	VOF	VOF	closed	378.2
ALB-VOF-867	VOF Easement	VOF	VOF	closed	125.37
ALB-VOF-1170	VOF Easement	VOF	VOF	closed	92.56
ALB-VOF-441	VOF Easement	VOF	VOF	closed	5.11



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